A TRIDENT SCHOLAR

PROJECT REPORT

NO. 33.

DEVELOPMENT OF A MODEL THAT DIFFERENTIATES BETWEEN THE PSYCHOLOGICAL MOTIVATIONS OF SUCCESSFUL AND UNSUCCESSFUL FOOTBALL PLAYERS

AD-749 675

UNITED STATES NAVAL ACADEMY

ANNAPOLIS, MARYLAND

1972

UNCLASSIFIED
Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY *(Corporate author)* U.S. Naval Academy, Annapolis.	2a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED 2b. GROUP

3. REPORT TITLE

DEVELOPMENT OF A MODEL THAT DIFFERENTIATES BETWEEN THE PSYCHOLOGICAL MOTIVATIONS OF SUCCESSFUL AND UNSUCCESSFUL FOOTBALL PLAYERS.

4. DESCRIPTIVE NOTES *(Type of report and inclusive dates)*

Research report.

5. AUTHOR(S) *(First name, middle initial, last name)*

William C. Pine

6. REPORT DATE May 19, 1972	7a. TOTAL NO. OF PAGES viii, 207 p.	7b. NO. OF REFS 48

8a. CONTRACT OR GRANT NO. b. PROJECT NO. c. d.	9a. ORIGINATOR'S REPORT NUMBER(S) U.S. Naval Academy - Trident Scholar project report. (U.S.N.A. - TSPR.no.33) 9b. OTHER REPORT NO(S) *(Any other numbers that may be assigned this report)*

10. DISTRIBUTION STATEMENT

This document has been approved for public release; its distribution is UNLIMITED.

11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY U.S. Naval Academy, Annapolis.

13. ABSTRACT

The purpose of this study was to isolate motivational factors, t may be associated with physical factors, which are important to the athletic success of football players.

A battery of four psychological tests was employed in this study The population studied consisted of 1320 midshipmen of the Class of 1975 at the United States Naval Academy. A lack of inter-test repetition among factors was ascertained by an analysis of correlation coefficients, indicating that the factors measured by these tests are mutually exclusive. An analysis of variance was used to establish significant motivational differences between football players and non-football players. Factors were also determined which differentiated between successful and unsuccessful football players. - Using these factors, approach for prediction of success in football were hypothesized.

A serendipitious finding was made which indicated that the correlation between unconscious and conscious motivation were not statistically significant. - Several areas of future research are identified.

DD FORM 1 NOV 65 1473

ia

UNCLASSIFIED
Security Classification

A TRIDENT SCHOLAR
PROJECT REPORT
NO. 33.

DEVELOPMENT OF A MODEL THAT DIFFERENTIATES BETWEEN THE PSYCHOLOGICAL MOTIVATIONS OF SUCCESSFUL AND UNSUCCESSFUL FOOTBALL PLAYERS

UNITED STATES NAVAL ACADEMY
ANNAPOLIS, MARYLAND
1972

11

U. S. N. A. - TSPR No. 33.

"Development of a Model that Differentiates Between the Psychological Motivations of Successful and Unsuccessful Football Players"

A Trident Scholar Project Report

by

Midshipman William C. Pine

United States Naval Academy
Annapolis, Maryland

Karel Montor
Assistant Professor Karel Montor

Accepted for Trident Committee

V V Utgoff
Chairman

19 May 1972
Date

PREFACE

This study was undertaken as part of a Trident Scholar Research program. It is the result of two semesters of study during the Academic year 1971-72.

The help and guidance of the project advisor Assistant Professor Karel Montor is sincerely appreciated. Thanks is also given to Associate Professor Harold M. Kaplan and Midshipman Doug Gilbert for their help in preparing the computer programs for analysis of the data.

TABLE OF CONTENTS

ABSTRACT i

PREFACE ii

LIST OF TABLES vii

Chapter

I. INTRODUCTION 1

Definition of Terms

Purpose and Approach of the Study

II. RELATED RESEARCH 4

III. RESEARCH METHODS 11

IV. ANALYSES AND RESULTS 19

V. CONCLUSIONS 42

Recommendations

APPENDIX A: Test Descriptions 45

APPENDIX B: Correlation Program 49

APPENDIX C: Sample Carrel Run 51

APPENDIX D: AMI Correlation Coefficients 53

APPENDIX E: Analysis of Variance Program 54

APPENDIX F: Sample VARIAN2 Printout 57

APPENDIX G: TRID 1 Profile - Class of 1975 59

APPENDIX H: TRID 2 Profile - Non-Football Players 62

APPENDIX I: TRID 3 Profile - First Day Football Turnout . . 65

APPENDIX J: TRID 4 Profile - All Centers 68

APPENDIX K: TRID 5 Profile - All Guards 71

APPENDIX L: TRID 6 Profile - All Tackles 74

APPENDIX M: TRID 7 Profile - All Tight Ends 77

APPENDIX N: TRID 8 Profile - All Running Backs 80

APPENDIX O: TRID 9 Profile - All Wide Receivers 83

APPENDIX P: TRID 10 Profile - All Quarterbacks 86

APPENDIX Q: TRID 11 Profile - All Defensive 89

APPENDIX R: TRID 12 Profile - All Linebackers 92

APPENDIX S: TRID 13 Profile - All Defensive Backs 95

APPENDIX T: TRID 14 Profile - All Specialists 98

APPENDIX U: TRID 15 Profile - All Managers 101

APPENDIX V: TRID 16 Profile - Football Players on Team at end of Summer 104

APPENDIX W: TRID 17 Profile - The Final 62 Players That Made the Team 107

APPENDIX X: TRID 18 Profile - The 180 men who did not make the final team 110

APPENDIX 1: MAT "Unconscious" Standard Deviation Scores for "TRID" Files 113

APPENDIX 2: MAT "Conscious" Standard Deviation Scores for "TRID" Files 114

APPENDIX 3: MAT "Total Motivation: Standard Deviation Scores for "TRID" Files . . 115

APPENDIX 4: "TRID" Line Summaries from Analysis of Variance 116

APPENDIX 5: Analysis of Variance - F Statistics 119

APPENDIX 6: Analysis of Variance "TRID" files vs. "TRID" Files 120

APPENDIX 7: List of "1/9" Computer Files 130

APPENDIX 8: Profile - Successful Centers 131
APPENDIX 9: Profile - Unsuccessful Centers 134
APPENDIX 10: Profile - Successful Guards 137
APPENDIX 11: Profile - Unsuccessful Guards 140
APPENDIX 12: Profile - Successful Tackles 143
APPENDIX 13: Profile - Unsuccessful Tackles 146
APPENDIX 14: Profile - Successful Tight Ends 149
APPENDIX 15: Profile - Unsuccessful Tight Ends 152
APPENDIX 16: Profile - Successful Running Backs 155
APPENDIX 17: Profile - Unsuccessful Running Backs 158
APPENDIX 18: Profile - Successful Wide Receivers 161
APPENDIX 19: Profile - Unsuccessful Wide Receivers 164
APPENDIX 20: Profile - Successful Quarterbacks 167
APPENDIX 21: Profile - Unsuccessful Quarterbacks 170
APPENDIX 22: Profile - Successful Defensive Ends 173
APPENDIX 23: Profile - Unsuccessful Defensive Ends 176
APPENDIX 24: Profile - Successful Linebackers 179
APPENDIX 25: Profile - Unsuccessful Linebackers 182
APPENDIX 26: Profile - Successful Defensive Backs 185
APPENDIX 27: Profile - Unsuccessful Defensive Backs 188
APPENDIX 28: Profile - Successful Specialists 191
APPENDIX 29: Profile - Unsuccessful Specialists 194
APPENDIX 30: MAT "Unconscious" Standard Deviation Scores for "1/9" Files 197
APPENDIX 31: MAT "Conscious" Standard Scores for "1/9" Files 199

APPENDIX 32: MAT "Total Motivation" Standard Deviation Scores for "1/9" Files 201

APPENDIX 33: "1/9" Line Summaries from Analysis of Variance 203

SELECTED BIBLIOGRAPHY 204

LIST OF TABLES

Table Page

1 Amount of Raw Data Collected per Individual 13

2 Sample Background Programs 16

3 Description of Factors 21

4 Self-Confidence & Emotionality Correlated w/other Factors 23

5 16PF Factors with Corr. Coeff. Greater than ± .50 . . . 24

6 MAT Factors with Corr. Coeff. Greater than ± .50 . . . 25

7 Correlation Coefficients for Unconscious vs. Total Motivation Areas for Each of the 10 General MAT Areas 25

8 Correlation Coefficients for Conscious vs. Total Motivation Areas for Each of the 10 General MAT Areas 26

9 Correlation Coefficients for Conscious vs. Unconscious Motivation Areas for Each of the 10 General MAT Areas 27

10 List of "TRID" Computer Files 28

11 Input for VARIAN2 Program 29

12 Entire Class vs. Specific Groups 31

13 Those Who Didn't Go Out for Football vs. Specific Groups 31

14 Final 62 Football Players vs. Specific Groups 32

15 Significant Differences between Football Players and Non-Football Players 33

16 Factors Significantly Different for Successful Football Players 34

17 Analysis of Variance on "1/9" Files 35

Table Page

18 Recurring Significant Factors in the Analysis of Variance by Position 36

19 Approach #1 to Model Building 37

20 Recurring Factors in Athletes with Motivational Problems 39

21 Approach #2 to Model Building 39

22 Comparison of Factors for Football Players and Non-Football Players 42

23 Comparison of Factors for Successful and Unsuccessful Football Players 43

24 Comparison of Factors for Successful and Unsuccessful Football Players 43

CHAPTER I

INTRODUCTION

This research deals with psychological factors related to football, as measured by a battery of four tests.

DEFINITION OF TERMS

Factors: The four tests included a total of 665 questions. These questions were grouped into 68 mutually exclusive areas which define different categories of psychological attitudes.

Motivation: A term used to denote the sum of some of the factors, when combined, that enables the identification of those individuals whose mental "set" is such that they are more desirous than others to achieve success in specific activities they undertake.

Motivation is a key aspect of life at the Naval Academy. The presence or absence of motivation has a direct effect on a man's performance. The manner in which this aspect is often evaluated is by observation alone. This can prove to be a difficult task indeed when large numbers of men are involved and leads one to the purpose of this research.

PURPOSE AND APPROACH OF THE STUDY

One area that demands a reasonably large degree of motivation from most of its successful performers is that of athletics. Popular areas of athletics, such as football, involve many men, and carry with them difficulties of evaluation. The purpose of this research was to analyze the usefulness of a battery of psychological tests to isolate certain psychological factors, which, in conjunction with physical factors, could be used to predict successful performance in football.

At the beginning of the project it was necessary to increase the researcher's knowledge in the areas of athletic motivation, psychological testing and theory. Talks with Dr. Bruce Ogilvie of San Jose State, and related readings provided the necessary background information in the area of athletic motivation. Selected readings in psychological theory and testing filled out the researcher's knowledge in these related areas.

The approach taken on this study was:

- Test selection and administration
- Determination of the necessity of all the factors measured by the test battery
- Determination of differences in psychological factors for football players when compared to non-football players
- Determination of factors significantly different for successful players as compared to unsuccessful football players
- Determination of initial success at prediction attempts

The primary concern in the selection of tests was the accumulation of data on psychological factors that would be desirable for football players. Several tests that had been used at the Academy in the past met the criterion requirements for this study. The tests selected for use in this research were: The Cornell Word Form test (CWF-2), [illegible] Personality Factor Questionnaire (16PF), The Motivational Analysis Test

(MAT), and The Athletic Motivation Inventory (AMI).

Tests were administered to the Class of 1975 within a week of their reporting to the Academy, with processing of the data taking the rest of the summer.

The extent of inter-test factor duplication was checked using correlational analysis techniques, and found not to be statistically significant.

Division of the Class of 1975 in to discreet sub-groups was undertaken to form a basis for comparison of successful and unsuccessful football players. Certain psychological factors were determined to be significantly different at the .05 level. Application of these factors to the Class of 1976 will be possible with the predictive approaches established in this research. Several areas for possible future research are suggested by the findings and can be found in Chapter V.

CHAPTER II

RELATED RESEARCH

The writer's first contact with athletic research was with Dr. Bruce Ogilvie of San Jose State, an expert in the field of athletic motivation. His article in the January 18, 1971 issue of Sports Illustrated lent impetus to the idea for the project.

Arrangements were made to have Dr. Ogilvie visit the Academy in early spring, 1971. The researcher had the opportunity to talk with him before his presentations to Academy personnel. The writer listened to his presentations to the Academy's athletic coaches, as well as to the instructors in the Division of Naval Command and Management. A final meeting with Dr. Ogilvie immediately after his speaking engagements permitted feedback of his observations on Academy athletic life. This provided additional considerations to the development of the design of this study.

Dr. Ogilvie highlighted the fact that some coaches have a difficult time judging certain motivational factors. He indicated that some tend to allow an athlete's physical ability to have a halo effect on their appraisal of motivation. The motivational areas observed by Dr. Ogilvie were generally "sports specific," due to an effort on his part to measure factors important in the high stress world of athletics. Study of these "sports specific" motivational areas indicated that coaches cannot be assumed to have a complete grasp of this area. However, in the development of a motivational inventory to measure factors and assist coaches, Dr. Ogilvie found that coaches did successfully recognize factors that they themselves had. Examples of these factors were drive, determination, and leadership. On the other hand, coaches were often unable to accurately analyze factors such as self-confidence, aggression, emotional control, conscience development, and the acceptance of responsibility for one's actions by observation alone.

Dr. Ogilvie's studies have shown that "compensatory greatness" needs to be taken into consideration. This is the term used for athletes who have great athletic ability, which compensates for low motivation. With information on champions as the criteria, motivational problem areas were noted by Dr. Ogilvie and suggested approaches presented.

Dr. Ogilvie's talks shed much light on the difficulties in analyzing motivation, and suggested a means for identifying problem areas and encouraging individual improvement. However, since the project was pointed towards a predictive capability based on motivation testing, a broader method of attack was involved. This involved the use of several tests, and demanded a thorough understanding of test design and construction.

After conclusion of the talks with Dr. Ogilvie, a comprehensive reading program was initiated. The first area considered the design and construction of tests. An extensive investigation of psychological theory was undertaken to obtain an understanding of the ratior le and interpretation of the factors measured by the tests. Finally, reading of sports related research provided a feel for what had been accomplished in research closely related to that of this project.

This paper purposely includes more areas than those directly related to the project, so that later Academy researchers can see the thought processes involved.

Psychological Testing, by Anastasi, was valuable in explaining the theory of the testing that was involved in this research.

A major point addressed by Anastasi was that of test reliability, and in particular error variance. Two sources of error variance that important to the study are temporal stability, and examiner and scorer reliability. Temporal Stability is the degree to which test scores are affected by fluctuations in subject and environment. It deals with random fluctuations from weather changes, noises, and other distractions. Changes in the subject due to illness, emotional strain, and recent experiences are also involved. This stability is dependent on time, and the shorter amount of time between testing sessions, the better the results. Examiner and scorer reliability are empirical controls of the test conditions. This can have a marked effect on scores, when one considers the importance of an examiner's rapport with, and motivation of the subjects, and the differences in scoring that could possibly occur. An assumption of this study is that temporal stability, examiner reliability, and scorer reliability criterions for valid testing were met as a result of the procedures used.

The importance of test validity was stressed by Anastasi, and in this research led to the use of previously validated tests. The tests met the following classifications of validity: Content validity, the coverage of a representative sample of the behavior domain to be measured; Face validity, the test measuring what the test appears to measure. As a point of interest,construct validity, the ability to measure the distinctness of a factor from other factors on a test, was studied in relation tho this research and was found not to be a statistical threat to the use of the test battery on this project. The Institute for Personality and Ability Testing's item analysis had carefully studied just this aspect for their tests used in this study (16PF and MAT). In addition, factor analysis, which is a correlation between factors, was used by the writer to study construct validity.

With this understanding of testing, the next step in preparing for the research to follow was obtaining a thorough grounding in related psychological theory. This was important for understanding of factors related to normal adjustment.

Freud's work, Psychoanalysis, reveals that hidden facets of an individual's personality can be determined by projective-type tests, for example the CWF-2, and that a person's responses on these tests express subconscious drives and motivations. Some aspects of a person's self are suppressed, often because they are painful or frowned upon by society and can only exist in this manner. Sexual elements are held to be important in the makeup of a subject, but due to social pressures in actual practice, must be expressed in acceptable fashion. An example would be the acceptable aggression of sports. This gives a basis for approaching one of the motivational factors observed in successful football players, specifically the high mating drive found in these individuals.

Introduction to Clinical Psychology gives a view of important factors in mental set related to normal functioning. One definition of normal behavior is that behavior which falls statistically within one standard deviation of the mean behavior for that factor.

The book Play Therapy suggested an approach to improving mental set by releasing feelings, rather than suppressing them. An example might be that of encouraging a football player to release his frustrations after a loss. The importance of attacking psychological problems head-on was the main thrust of the book.

Personal Adjustment showed the importance of a good self-image and self-confidence to a healthy personality. Successful football players were found to be significantly more self-confident than unsuccessful football players and this is discussed later in the study.

In Motivation and Emotion by Young, it is seen that one's level of performance varies with his degree of motivation. This relates directly to the main thrust of the project. The importance of motivation was later determined by the findings of the research.

Motivation and Personality leads into the idea that emotionally mature individuals cope well with their environment. These people are more likely to meet their goals than others. This was borne out by the fact that successful football players were significantly more emotionally stable than unsuccessful players.

The overall point of the theoretical reading was to explore the areas that are relevant to the project. Before discussing sports specific literature, one more book of particular importance is mentioned. The 16PF Manual discusses psychological theory and the way the 16PF test is designed to mesh with that theory. It is particularly useful in relating theory to testing practices.

The final area probed in establishing a thorough background knowledge is that of sports related research. Dr. Ogilvie's book Problem Athletes and How to Handle Them indicates that self-centerednes, high anxiety, fear of failure, fear of success, a narcissistic attitude, and instability all are detrimental to performance.

The factors mentioned were confirmed by this research. Dr. Ogilvie's article in Sports Illustrated noted the counseling value of his test, and pointed out areas that were significant for certain football positions. In comparing a "potential realizer" (one who realizes his potential, ie: performs at his highest possible level) with a "potential non-realizer," he found emotional stability and mental toughness to be important. This was proven to be particularly true for emotional stability, and to a lesser degree, for mental toughness, by the findings of the researcher's study. Several of his articles are related to psychological tests and indicate differences between winning and losing teams and winning and losing individuals, which is related to the purpose of this study. In a study of pro-football players, Kane found self-discipline, extraversion, emotional stability, and assertiveness to be the earmarks of a good player, using the 16 Personality Factor Questionnaire.

CHAPTER III

RESEARCH METHODS

The purpose of the research was to isolate psychological factors which in conjunction with physical factors can be used to predict successful performance in football.

Three tests dealing with psychological factors had been evaluated at the Academy. These were the Cornell Word Form Test (CWF 2), the Sixteen Personality Factor Questionnaire (16PF), and the Motivation Analysis Test (MAT). A sports specific test developed by Dr. Bruce Ogilvie primarily as a counseling tool, the Athletic Motivation Inventory (AMI), was selected to provide specific athletic motivation input. These four tests were chosen to make up the battery to be given to the population of this study, the entering class of midshipmen who entered the Academy during the summer of 1971.

The CWF 2 is an eighty question short answer word association test. The test manual indicates that it is a "Rapid psychiatric assessment of large numbers of persons to contribute a descriptive sketch of an individual's adaptive and adjustment mechanisms in a manner not apparent to the subject. Primarily, it has shown itself to be effective in indicating the presence of disturbances in adjustment, as exhibited in psychotic, psychoneurotic, and relevant bodily reactions and diseases."

The 16PF Manual states that "The 16PF test is a multidimensional set of sixteen questionnaire scales. It is designed to make available information about an individual's standing on the majority of primary personality factors." It gives information on sixteen primary factors of personality, and on four secondary personality factors derived from the primary factors. Careful testing by the Institute for Personality and Ability Testing over the years has established the distinctness of each primary factor measured by this test.

The <u>MAT</u> gives indications of various aspects of a subject's motivation. It covers ten general motivational areas. For each area, an unconscious motivation factor, a conscious motivation factor, and a total motivation factor is determined. In addition, four special total factors are derived from the total motivation factors.

The <u>AMI</u> deals with psychological characteristics that may be possessed by, and distinguish high level athletic performers from low level performers. This involves eleven sports related motivational factors, and two additional factors which are used to verify the test results.

As a matter of administrative note, arrangements were made with the Institute for Personality and Ability Testing (IPAT), who developed the <u>16PF</u> and <u>MAT</u>, to obtain these two tests at a reduced cost if we would do our own scoring, and provide them with royalty payments for their use. In addition, Dr. Ogilvie very graciously allowed the writer to use his test for the research.

It was decided to use the entire incoming United States Naval Academy Class of 1972 as the population, as opposed to just testing prospective football players. Contributing factors to this decision were the interest expressed by some of the other coaches and by the Office of the Commandant of the Naval Academy in the results of this testing. Arrangements were made to set up a testing program for the summer of 1971. Computer mark sense answer cards were prepared for each individual. The <u>CWF 2</u> and <u>16PF</u> testing involved the entire class and was administered in the Midshipman Ward Room (dining hall). Proctors attempted, with limited success, to check to assure that all the tests had been answered completely, and with no extraneous marks or duplicate answers. The <u>AMI</u> and <u>MAT</u> were given to one third of the population at a time. All testing was done during the first week the new freshmen were at the Academy. This was done early in the summer to avoid the effects of test "wiseness." In addition this minimized the possibility of such test answering methods as the "sinusoidal wave" method (ABCDEDCBA, etc.) or the "unending constant" method (BBBB, etc.). When one looks at Table 1, below the magnitude of the testing can be clearly seen.

Table No. 1 - Amount of Raw Data Collected per Individual

Test	No. of Questions per Test	No. of Computer Answer Cards per Test	No. of Factors
CWF 2	80	2	1
AMI	190	4	13
16PF	187	4	20
MAT 1	48	1	34
MAT 2	56	2	
MAT 3	48	1	
MAT 4	56	2	
Totals	665	16	68

The population consisted of 1320 men. With the above table in mind it can be seen that 21,120 (16x1320) cards were completed, giving answers to 877,800 (1320x665) questions. Incorrect marking of many questions proved to be a problem in obtaining accurate raw data. The magnitude of the problem was such that extra help was needed to rectify the matter. The computer was used to determine which cards were improperly marked. Approximately fifty hours were spent taking tests back to individuals who had made serious mechanical mistakes and having them correct these errors. An additional 100 hours of card recopying was also required. Correction of cards was completed by 1 September 1971.

A computer program was developed that included all scores for an individual on one punched card. These cards were to prove of great value later on in setting up data files. They contained information on all 68 factors.

The next step in the research was to determine the construct validity of the test battery. The need to actually use all 68 factors in the analysis of this report was determined by taking correlation coefficients of all possible pairings of the factors. The computer print-out time presented a particular problem. Time wise, it was best to input only twelve factors at a time (i. e. factors 1 to 6 vs. factors 7 to 12). In order to run all possible pairings of the factors, sixty-six runs of this nature were needed. Input time, run time, and output time for a single run came to about fifteen minutes. To circumvent this problem of extended time at the terminal six terminals were used at once, and this reduced the researchers' time at the terminals from eighteen hours to three hours. The result of these runs was a total of 2312 correlation coefficients. Only correlation coefficients greater than plus or minus .5, the level at which these correlations became significant, are discussed in detail in this report. A chart was complied of all 2312 correlation coefficients, to show the general relationship patterns of the factors in the battery. The results indicated that all 68 factors should be used as they were not duplicative and were mutually exclusive.

After the correlation analysis, the writer proceeded with an analysis of variance of groups selected from the population. The groups were classified on the basis of the football coaches' lists of men who had turned out for football, and the positions to which they had been assigned. Cards for each group were isolated and new files fed into computer storage as "TRID" files. With the population broken down into various groups for analysis, the acquisition of a computer program to do the work was in order. This was to prove to be a more difficult proposition than was the case in securing a program for the correlational analyses. Midshipman Doug Gilbert, a math and computer major, came to the rescue and prepared a program, VARIAN 2, which was able to do an analysis of variance between two groups - on all 68 factors for each group. Once again, the runs of the computer program presented particular problems. The requirement of the computer program was that each individual in each group must have scores for all sixty-eight factors measured by the battery. As a result, cards with less than sixty-eight factors had to be sorted out and not considered in this analysis. This involved the elimination of 21 of the 1320 individuals that comprised the population. The computer was programed to run one group against another (i. e., TRID 1 vs. TRID 2) and list the F statistic for each of the sixty-eight factors for the two "TRID" files. Computer run time was again a problem. Due to the long run time of the program, special arrangements had to be made to increase the researcher's allowable run time. Each "TRID" file comparison print-out took ten minutes, in addition to the long run time (internal processing in the computer) already mentioned. Once more, the use of many terminals sped up the work. However, some of the runs involved so much run time that it became necessary to use background privileges on the computer. This involved not only the availability of extended run time, but allowed use of the high speed printer as well. Table No. 2 show samples of the programs used to accomplish this.

Table No. 2 - Sample Background Programs

Program #1	T12	Program #2	B12
(Background Program)	10 RUN 20 OLD VARIAN2 30 INPUT B12 40 OUTPUT PRINTER @@@ 50 END	(Data Input File)	"TRID1","TRID2" 1299,980,68

The first computer program, T12 calls up the main program, "VARIAN2" and uses the input file, B12 to get the data into use, and outputs on the high speed printer via the PRINTER@@@ library program.

The second program, B12, is the data input file. Seventeen pairs of programs of this nature were used. After all the runs had been completed, in background and otherwise, about sixty computer hours had been used for the analysis of variance runs performed on this project.

With the analysis of variance data available, differences in factors from comparisons of two "TRID" files could be calculated. Significance in this report should be understood as at the .05 level or higher. Significant differences were found between football players and non-football players. Significant differences in factors between successful football players (those who made the final team) and unsuccessful football players were also found. Other approaches to looking at differences in psychological factors between successful and unsuccessful players, were analyzed and charted. Factors that showed up repeatedly at the .05 level of significance are discussed in the next chapter.

Finally, the approaches for picking successful players were developed. A criterion of success was available in the coaches' list of the top sixty-two men on the freshmen football team. With information on significantly different factors, from the comparison of successful and unsuccessful football players, a clinical interpretation of desirable scores for each factor was made. The number of factors scored favorably was noted, and approaches for predicting successful football players determined. The results were then compared to the coaches' group, and the degree of success noted. In one approach those who were predicted to be successful and were not, were shown to the coaches. The coaches comments on a few of the individuals were that they were "motivational problems." Certain factors showed up repeatedly for these individuals. A close look at these factors made it clear that they were detrimental to success. Low fear and low anxiety were the factors common the these "motivational problems." Once again, with these undesirable factors as a consideration, predictions were made, and a more successful comparison to the criterion was realized. With this explanation of the research methods involved in the project as a framework, a study of the analysis of the research can now be presented.

CHAPTER IV

ANALYSES AND RESULTS

In the testing used during the summer of 1971, one consideration weighed heavier than any other. The goal of the test administration was to obtain accurate and truthful answers from all the subjects. In order to assure the truthfulness of the answers, several procedures were used. The effects of uncomfortable test conditions, long testing sessions, and a "worldly" attitude towards getting things out of the way that grows in the experienced freshmen were all considered. As a result, test periods were kept to reasonable lengths. The tests were given in relatively pleasant surroundings, especially when one considers the fact that this testing offered a respite of sorts from the strenuous schedule of the new freshmen. In order to combat the "worldly" approach to test taking, the tests were given within seven days of the subjects' arrival at the Naval Academy. Only a handful of subjects had to be approached later when it appeared that they had answered without looking at the tests.

However, many subjects did leave answers blank and/or put down double answers and/or slipped whole blocks of answers up or down, and/or answered one test on the answer card for another test. Efforts to prevent this had consisted of three proctors at each testing session checking completed cards, but this proved to be insufficient when large groups of subjects finished at once. As a result, many errors went undetected by the proctors, though they were later caught during the computer check on the cards. The inclusion of the entire class of 1975 was considered important to the completeness of the study, therefore efforts were made to correct errors. The writer was helped by many persons in accomplishing the individual corrections required; and by the end of the summer, accurate, error-free data existed for all tests that were taken by the midshipmen.

The vast majority of the 1320 man population had scores for all sixty-eight factors measured by the battery. Only twenty-one men did not have scores for all four tests. Table No. 3, on the next page, gives a breakdown of exactly what the four tests in the battery measured, matching factor numbers with the description of what the Factor measures. A more detailed explanation of each factor can be found in Appendix A.

Since four different tests had been utilized, the possibility of repetition among factors existed. The degree of repetition, if any, was ascertained by a correlational analysis. The 16PF and MAT, both developed by the Institute for Personality and Ability Testing (IPAT) have been thoroughly analyzed on an individual item basis, and are well proven tests. The CWF 2 is a general mental fitness test, and as such has been used with confidence by the Naval Academy for some years. The AMI, by Drs. Ogilvie, Tutko, and Lyon, was developed primarily as a test to assist coaches as a tool in coaching and counseling individuals.

Table No. 3 - Description of Factors

Test	Factor #	DESCRIPTION LOW	DESCRIPTION HIGH
CWF 2	1		High Anxiety/Poor General Mental Set
AMI	2		Drive
	3		Self-Confidence
	4		Aggressiveness
	5		Coachability
	6		Determination
	7		Emotionality
	8		Conscience Development
	9		Trust
	10		Guilt Proneness
	11		Leadership
	12		Mental Toughness
	13		Accuracy Measure
	14		Strength of Score
16PF	15	Reserved	Outgoing
	16	Less Intelligent	More Intelligent
	17	Affected by Feelings	Emotionally Stable
	18	Humble	Assertive
	19	Sober	Happy-Go-Lucky
	20	Expedient	Conscientious
	21	Shy	Venturesome
	22	Tough Minded	Tender Minded
	23	Trusting	Suspicious
	24	Practical	Imaginative
	25	Forthright	Shrewd
	26	Placid	Apprehensive
	27	Conservative	Experimenting
	28	Group Dependent	Self-Sufficient
	29	Undisciplined Self-Conflict	Controlled
	30	Relaxed	Tense
	31	Low Anxiety	High Anxiety
	32	Introversion	Extroversion
	33	Tenderminded Emotionality	Alert Poise
	34	Subduedness	Independence

Test	Factor #	DESCRIPTION	
		LOW	HIGH
MAT - Unconscious Motivation			
	35		Career
	36		Home/Parental
	37		Fear
	38		Narcissism/Comfort
	39		Superego
	40		Self-Sentiment
	41		Mating
	42		Pugnacity/Sadism
	43		Assertiveness
	44		Sweetheart/Spouse
MAT - Conscious Motivation			
	45		Career
	46		Home/Parental
	47		Fear
	48		Narcissism/Comfort
	49		Superego
	50		Self-Sentiment
	51		Mating
	52		Pugnacity/Sadism
	53		Assertiveness
	54		Sweetheart/Spouse
MAT - Total Motivation			
	55		Career
	56		Home/Parental
	57		Fear
	58		Narcissism/Comfort
	59		Superego
	60		Self-Sentiment
	61		Mating
	62		Pugnacity/Sadism
	63		Assertiveness
	64		Sweetheart/Spouse
MAT - Special Totals			
	65		Autism/Optism
	66		Information/IQ
	67		Total Integration
	68		Personal Interest

The "CARREL" computer program enabled ascertaining of all correlation coefficients used in this study. This program which is in XBASIC computer language is displayed in Appendix B.

This program matches one group of factors against a second group of factors and indicates the means and standard deviations of each factor, as well as the associated correlation coefficients. Appendix C shows a sample run of this program. The data used in this run came from a computer file named "TRIDENT," which contained all test data on the full population of 1320 men.

After all sixty-eight factors had been cross compared against all others, and the results charted, certain patterns of correlation coefficients were discerned, and are discussed later in this chapter.

The AMI was found to have high intra-factor correlation coefficients, that is high for its factors when compared against the intra-factor correlations obtained for the 16PF and the MAT. Appendix D presents the correlations between all the factors on the AMI.

Table No. 4, below, extracts and presents some of the high correlations found in Appendix D.

Table No. 4 - Self-Confidence & Emotionality Correlated w/other Factors

Self Confidence	vs. Determination	= .55	Emotionality	vs. Trust	= .52
	vs. Emotionality	= .55		Mental Toughness	=.57
	vs. Leadership	= .60			

These two factors, self-confidence and emotionality, appeared to be key factors. These correlations raise the question of whether the AMI might be more of a unitary measure of favorable athletic motivations than a group of distinct motivational factors, when looked at as other than a counseling tool.

The 16PF also had some correlation coefficients of plus or minus .50 or greater among the corss comparrison of its factors, and these are presented in the following table.

Table No. 5 - 16PF Factors with Corr. Coeff. Greater than ± .50

FACTOR	FACTOR	CORRELATION COEFFICIENT
Emotionally Stable	Apprehensive	-.55
Emotionally Stable	Tense	-.62
Emotionally Stable	High Anxiety*	-.54
Happy-Go-Lucky	Venturesome	.50
Happy-Go-Lucky	Extroversion*	.60
Venturesome	Extroversion*	.68
Conscientious	Controlled	.56
Apprehensive	Tense	.58
Apprehensive	High Anxiety*	.55
Experimenting	Independence*	.63
Self-Sufficient	Independence	.52
Tense	High Anxiety*	.61
Tenderminded	Alert Poise*	-.80

* indicates second order factors derived from the primary factors.

The relationship between these factors were higher than one might expect based on the analyses in the 16PF Handbook, and as such present an area for future study to determine whether chance or causality is involved.

Four MAT correlation coefficients, above .50, existed for the special total factors, and these are listed on the next page.

Table No. 6 - MAT Factors with Corr. Coeff. Greater than ± .50

FACTOR	FACTOR	CORRELATION COEFFICIENT
Autism/Optism	Total Integration	.58
Autism/Optism	Personal Interest	.53
IQ	Personal Interest	.58
IQ	Total Integration	.57

These correlation coefficients were higher than might be expected, and are possible areas for future research to determine if chance or causality is the reason for their relationships.

Correlation coefficients greater than plus or minus .5 were found between unconscious and total motivation factors for each of the ten general motivational areas, as seen in the following table.

Table No. 7 - Correlation Coefficients for Unconscious vs. Total Motivation Areas for Each of the 10 General MAT Areas

MOTIVATIONAL AREA	CORRELATION COEFFICIENT
Career Sentiment	.69
Home Parental Sentiment	.74
Fear Drive	.70
Narcism-Comfort Drive	.78
Superego Sentiment	.73
Self-Concept Sentiment	.76
Mating Drive	.76
Pugnacity-Sadism Drive	.78
Assertiveness Drive	.71
Sweetheart-Spouse Sentiment	.76

These correlations are partially explained by the scoring procedure, as the total motivation factors are influenced by the unconscious factors.

Correlation coefficients greater than plus or minus .5 were found between conscious and total motivation factors for each of the ten general motivational areas, and are noted below.

Table No. 8 - Correlation Coefficients for Conscious vs. Total Motivation Areas for Each of the 10 General MAT Areas

MOTIVATIONAL AREA	CORRELATION COEFFICIENT
Career Sentiment	.75
Home-Parental Sentiment	.75
Fear Drive	.70
Narcism-Comfort Drive	.70
Superego Sentiment	.80
Self-Concept Sentiment	.62
Mating Drive	.77
Pugnacity-Sadism Drive	.74
Assertiveness Drive	.74
Sweetheart-Spouse Sentiment	.70

Once again, the correlations above are partially explained by the scoring procedure, as total motivation factors are influenced by the conscious factors.

One group of MAT correlation coefficients that were of interest due to the fact that they were so low were the correlations between unconscious and conscious motivation factors for each of the 10 general motivation areas, as seen in Table No. 9 on the next page.

This raises the question as to the degree of causality between the unconscious and conscious aspects of these general motivational areas. This is of interest since higher correlations would be expected based on current psychoanalytical theory.

Table No. 9 - Correlation Coefficients for Conscious vs. Unconscious Motivation Areas for Each of the 10 General MAT Areas

MOTIVATIONAL AREA	CORRELATION COEFFICIENT
Career Sentiment	.09
Home-Parental Sentiment	.15
Fear Drive	.05
Narcism-Comfort Drive	.13
Superego Sentiment	.24
Self-Concept Sentiment	.00
Mating Drive	.21
Pugnacity-Sadism Drive	.21
Assertiveness Drive	.08
Sweetheart-Spouse Sentiment	.09

The only inter-test correlation coefficient greater than plus or minus .5 was between Emotionality on the AMI and Tense on the 16PF, and it was -.53. This single high correlation between factors from different tests suggests that these factors may be duplicative, but since this was the only high inter-test correlation the general conclusion is that the sixty-eight factors are not duplicative thou this particular relationship is worthy of further future investigatio.

The correlation coefficient analyses provided many interesting intra-test relationships, and they too provide possible areas for future research to determine the significance of their relationships. Thus it appears that all sixty-eight factors measured by the test battery are contributing unique information, and are necessary to giv as complete a picture of the population as possible.

In order to observe factor variance, to determine differences between football players and non-football players, the population w divided into groups. These groups were classified on the basis of those who came out for football the first day, and the positions for which they tried out. Each of the groups was entered into computer storage as a "TRID" file. A listing of the files into which the groups were categorized follows.

Table No. 10 - LIST OF "TRID" COMPUTER FILES *

TRID 1	Entire Class
TRID 2	Those Who Didn't Go Out First Day
TRID 3	First Day Football Turnout
TRID 4	Centers
TRID 5	Guards
TRID 6	Tackles
TRID 7	Tight Ends
TRID 8	Running Backs
TRID 9	Wide Receivers
TRID 10	Quarterbacks
TRID 11	Defensive Ends
TRID 12	Linebackers
TRID 13	Defensive Backs
TRID 14	Specialists
TRID 15	Managers
TRID 16	Players Remaining at End of Summer
TRID 17	Final 62 Players (Made the Team)
TRID 18	Players Remaining at the End of the Summer who were Unsuccessful in Making the Team

* Detailed Listings may be Found in Assistant Professor Karel Montor's files in Luce Hall

A computer program "VARIAN2" was developed to do the analysis of variance involving the foregoing "TRID" files. This program is listed in Appendix E. Table No. 11 on the following page gives the input for a run, and reference to it clarifies the following explanation.

Table No. 11 - Input for VARIAN2 Program

```
READY

OLD VARIAN2 *
READY

RUN *

VARIAN2   13 MAY 72  14:01                        *

INPUT THE NAMES OF THE FILES IN QUOTATIONS? "TRID17","TRID16"

INPUT THE NUMBER OF ROWS OF DATA IN TRID17 AND TRID16 CONSECUTIVELY
AND THE NUMBER OF COLUMNS CONTAINING TEST SCORES
? 62,242,68
      *     MEAN                      STANDARD DEVIATION
TEST GROUP#1      GROUP#2          GROUP#1            GROUP#2       F

 1    4.72581     4.06612          4.13767             3.31409     1.7573
 2    6.35484     6.1281           1.33179             1.34354     1.4106
 3    6.62903     5.95868          1.69119             1.80776     6.9623
 4    5.74194     5.47934          1.55696             1.58624     1.3627
```

* indicates operator input

The computer received as input the names of two of the files, (TRID17,TRID16) the number of individuals in each of the groups represented by the files, (62,242) and the number of factors to be studied (always sixty-eight). For each factor, the program printed the mean and standard deviation for both groups and the F statistic for those two groups on that factor. At the end of the run, the degrees of freedom for that run were printed to allow calculation of levels of significance for the run. A sample run of the program is seen in Appendix F.

Using the information from these printouts, profiles for all 68 factors for "TRID 1" through "TRID 18" were made and can be seen in Appendix G through Appendix X. Appendices 1, 2, and 3 respectively provide the Standard Deviation Scores for the MAT Unconscious, Conscious, and Total Motivation Areas.

Appendix 4, summarizes the degrees of freedom for each of the 137 "TRID" comparison runs. With the information from that table, the F statistic for various levels of significance can be determined for any one run using Appendix 5. If the statistic beside any factor of that run is higher than one of the F statistics for that run, the factor was significant at that level.

Appendices 6A through 6p summarize the factors significant at various levels for each of the 137 runs of VARIAN2.

The most interesting relationships were among the entire class, those not going out for football (non-football players), the first day football players, the football players still out for the team at the end of summer, and the sixty-two football players who made the final team.

On the next page Table No. 12 compares the entire class against various specific groups.

Table No. 12 - Entire Class vs. Specific Groups

A - Denotes that the factor followed by A was significantly higher for the entire class than the other group.

B - Denotes that the factor followed by B was significantly higher for the specific group being matched against the entire class.

Specific Group	LEVELS OF SIGNIFICANCE .05	 .025	 .01
Those who didn't go out	10A		2A,4A
First Day football turnout	24A,49A		2B,3B,4B,10B,11B, 14B,16A,39A,59A
Players remaining at end of summer	50A,59A	24A,60A,66A 68A	2B,3B,4B,10B,11B 65A
Final 62 Players	14B,37A	7B,12B,17B, 66A,68A	2B,3B,4B,10B,11B 16A

The entire class was lower than each group of football players on factors 2(drive), 3(self-confidence), 4(aggressiveness), 10(guilt proneness), and 11(leadership). A comparison of those who did not go out for football and the different groups of football players follows.

- A - - B -

Table No. 13 - Those Who Didn't Go Out for Football vs. Specific Groups

Specific Group	.05	.025	.01
First Day	5B,12B,19B	20A,50A,66A	2B,3B,4B,10B,11B,14B
Football Turnout	25A,28A	68A	16A,24A,39A,49A,59A, 65A
Players remaining at end of season	19B,28A	14B,16A,20A 39A,50A	2B,3B,4B,10B,11B,12B, 24A,59A,60A,65A,66A,68A
Final 62 Players	1B,37A,46A	7B,14B,17B,65A	2B,3B,4B,10B,11B,12B, 16A,66A,68A

Those who did not go out for football were significantly lower in factors 2(drive), 3(self-confidence), 4(aggressiveness), 10(guilt proneness), 11(leadership), and 12(mental toughness). Those who did not go out for football were higher on factors 16(intelligence), 66(IQ), and 68(personal interest) than those who went out for football.

The third comparison of importance was that of the sixty-two men who made the final team, against everyone who came out for football the first day and against all the players remaining on the team at the end of the summer. Table No. 14 points out the relationships involved between these groups.

Table No. 14 - Final 62 Football Players vs. Specific Groups

A - Denotes that the factor followed by A was significantly higher for the final 62 football players.

B - Denotes that the factor followed by B was significantly higher for the specific group compared to the final 62 football players.

	LEVELS OF SIGNIFICANCE		
Specific Group	.05	.025	.01
First Day football turnout	16B,17A		3A
Players remaining at end of summer		16B	3A

The final sixty-two players came out lower on factor 16(intelligence) but higher on factor 3(self-confidence). The most clear cut differences shown in the tables are between football players and non-football players. With the first day football turnout designated as "football players," significant differences between football players and non-football players are indicated in the following table.

Table No. 15 - Significant Differences between Football Players and Non-football Players (Factor is highest for group under which listed)

LEVELS of SIGNIFICANCE	FOOTBALL PLAYERS	NON-FOOTBALL PLAYERS
.05	Coachability Mental Toughness Happy-Go-Lucky	Shrewd Self-Sufficient
.025		Conscientious Self-Sentiment IQ Personal Interest
.01	Drive Self-Confidence Aggressiveness Guilt Proneness Strength of AMI Score	Intelligent Imaginative Superego(unconscious) Superego(conscious) Superego(total motivation) Autism/Optism

The other "TRID" groups provided additional contrasts, particularly the analysis of variance between positions, since it provided an opportunity to see some of the differences that had been enumerated in magazine articles read on this project. Factors such as self-confidence, drive, intelligence, emotionality, and aggressiveness were noted due to the fact that they had shown up significantly as would be expected from the writings of Kane and Rushall.

The differences between football players and non-football players raises the question whether significant differences might also exist between successful and unsuccessful football players.

Of the 1320 men in the class of 1975, there were 242 under consideration for the freshmen football team. Sixty-two were eventually chosen for the final team, and 180 men were rejected. These groups will henceforth be considered as the "successful" and the "unsuccessful" football players. The factors that were significantly different in an analysis of variance of these two groups are noted in the following table.

Table No. 16 - Factors Significantly Different for Successful Football Players (Factor is higher for group under which listed)

Levels of Significance	SUCCESSFUL PLAYERS	UNSUCCESSFUL PLAYERS
.05	Leadership Assertive	Home-Parental Sentiment
.025	Emotionally Stable	
.01	Self-Confidence	Intelligent

In another approach to determining differences between successful and unsuccessful players, the men were categorized by position as to whether or not they had successfully been selected for the final team. These groups were classified as "1" groups or "9" groups. The "1" groups were the successful players, and the "9" groups were the unsuccessful players. These data for these groups were then entered into the computer's memory. Appendix 7 gives a description of the "1/9" computer files that contained these groups. Once again, the "VARIAN2" computer program was used to run an analysis of variance on the "1/9" data files. Only eleven runs were required, one for each of the eleven positions used for classification.

The results of the runs are in the same form as the "TRID" runs. Appendices 8 through 29 show profiles of all sixty-eight factors for each of the twenty-two "1/9" files. Appendices 30, 31, and 32 respectively provide the standard deviation scores for the MAT Unconscious, Conscious, and Total Motivation Areas.

Line summaries of the degrees of freedom obtained in each run are included in Appendix 33. Table No. 17 presents the significant factors for each position.

Table No. 17 - Analysis of Variance on "1/9" Files

A - Significantly higher for those playing football at end of [illegible] who DID NOT make the final 62 man cutoff.

B - Significantly higher for those playing football at end of su [illegible] who DID make the final 62 man cutoff

	LEVELS OF SIGNIFICANCE		
Position	.05	.025	.01
Centers		18B	
Guards	4B,10B	13B	
Tackles		3B	
Tight Ends	2B,3B,5B		
Running Backs	3B,17B,51B		13B,18B
Wide Receivers	5B,52B,56A		31B,48A,62B
Quarterbacks	14B,32B	21B,61B	48A,51B,58A
Defensive End	19A,32A	1B	
Linebackers	17B,49A,64A	13B	47B,54A
Defensive Backs	24A		19A,40B
Specialists		16A,33B	

An examination was made of the significant factors by position, and a total of eight factors were found to occur more than once. Table No. 18 indicates these factors.

Table No. 18 - Recurring Significant Factors in the Analysis of Variance by Position

FACTOR #	FACTOR DESCRIPTION	SIGNIFICANTLY HIGHER GROUP (1 or 9)
3	Self-Confidence	1
5	Coachability	1
13	Accuracy Measure	1
17	Emotionally Stable	1
18	Assertive	1
19	Happy-Go-Lucky	9
48	Narcissism/Comfort Erg	9
51	Mating Erg	1

As indicated in Table Nos. 12, 13, 14, 15, and 16 self-confidence is noticeably higher for all football players and also higher for the better players.

Coachable, emotionally stable, assertive players with low comfort needs were selected by the coaches and form a basis for the foregoing table (#18). As the mating erg was significantly higher for successful football players Freud's concept of sexuality, with football as an acceptable outlet may present an explanation and an outlet for the sexual energies of the football players. Thus better players expend more energy on football and thus can concentrate on their play as a result.

To help the researcher establish a model for predicting success in football, coaches provided a list of the sixty-two football players that made the final team, ranked from best to worst.

The first approach to establishing a model for predicting football success considered the factors shown to be significantly different with respect to successful players vs. all the unsuccessful players (ie. self-confidence, assertiveness, leadership, emotionally stable, home-parental sentiment, and intelligence). For each of the 242 men considered for the football team, the number of times a favorable factor was achieved, was noted. Table No. 19 provides the results of this approach.

Table No. 19 - Approach #1 to Model Building

	No. of Men with avorable Scores on Sig. Factor							
Number of Favorable Scores	0	1	2	3	4	5	6	Total
All Football Candidates	118	83	28	10	3	0	0	242
Men Picked for the Team	25	17	15	4	1	0	0	62

Factor	Favorable Score Range (Sten)
Self-confidence	8 to 10
Assertiveness	8 to 10
Leadership	9 to 10
Home-Parental Sentiment	1 and 2
Emotionally Stable	9 to 10
Intelligent	1 and 2

The next step in developing the model was to establish an individuals having achieved two or more factors as a cutoff point. All men above the cutoff point were predicted to be successful. Of the forty-two predicted to be successful by the writer twenty were so confirmed by the coaches (47.6%). This is the simplest of the three models proposed by the researcher.

The second approach to a model for prediction considered factors shown to be significantly different in the analysis by position. (See table No. 18 on page 36 for factors involved).

The number of times each individual of the 242 football players achieved a favorable score on one of the significant factors, was recorded. In the second model approach, all individuals achieving more than one favorable factor are predicted on a theoretical basis to be potentially successful. This group of players who were predicted to be successful on the basis of their motivational set were then compared against the coaches' criterion group. During the initial calculations of this second model it was found that of the seventy-eight predicted to be successful only thirty-four were (44%). An explanation of this apparent discrepancy follows.

A list was compiled of all those predicted to be successful who were not. The coaches were then consulted as to the reason for the nonselection of these forty-four individuals. In thirty-nine of the forty-four cases, the lack of selection was explained as a matter of lack of athletic capability. Five individuals were cited as motivational problems. In examining the profiles of each of these individuals, certain factors were seen to recur. These factors are presented below in Table No. 20.

Table No. 20 - Recurring Factors in Athletes with Motivational Problems (found in 3 or more individuals).

Factor #	Factor Description	Sten range of Scores	Frequency of Recurrance
31	Low Anxiety	1 to 2	3
57	Low Fear (Total)	1 to 2	4

The fear and anxiety factors were considered from a negative standpoint in an attempt to increase the predictive accuracy of the model. These factors offset the positive factors by being subtracted from the total number of favorable factors achieved. All individuals achieving a total of two or more favorable factors after considering the negative factors were predicted to be successful. Table No. 21 presents the results of this approach.

Table No. 21 - Approach #2 to Model Building

	No. of Men with Fav/Unfav Scores on Sig Factors									
Number of Favorable Scores	-2	-1	0	1	2	3	4	5	6	7
All Football Candidates	1	30	87	68	35	16	5	0	0	0
Men Picked for the Team	0	7	12	14	13	13	3	0	0	0

Factor	Sten Range	Factor	Sten Range
Self-Confidence	8 to 10	Low Anxiety	1 to 2
Coachability	7 to 10	Narcism-Comfort Drive	1 to 4
Accuracy Measure	2 to 10	Mating Drive	9 to 10
Emotionally Stable	9 to 10	Low Fear	1 to 2
Assertive	8 to 10		

Of the fifty-six men predicted to be successful using this second version of the second model, twenty-nine actually made the final team (51.8%)

Of the men ranked by the coaches as the top twenty players, thirteen were selected, by the researcher, using this second model. The seven successful players not predicted by the battery had unimpressive motivational profiles. This approach had the highest percentage of predictive accuracy for prediction of football success.

A third approach involved a simple arithmetical combination of the results of the first and second approaches. All men predicted to be successful in those models were predicted to be successful in this model. The total number of men predicted to be successful was 73, and of those, 35 made the final team (47.9%). This third model indicated the largest number of successful players, though as previously noted the highest predictive percentage (51.8%) was achieved using model #2.

Possible statistical threats to the validity of the study will now be considered. With respect to the effects of mass testing the failure of an individual subject to express his true feelings in answering questions may have influenced the results. However the efforts made to counteract this threat were explained earlier, and an assumption is made in this study, that these efforts were effective. The threat that the tests influenced the subjects' attitude, and thus his answers does exist. The extent of this effect is an area for future research.

The effects of foreign students taking the battery were considered, The seven foreign students who had difficulties with the battery due to language differences were estimated to have had little effect on mean and standard deviation values as their scores were buried in the 1299 man "TRID1" file for the analysis of variance.

An assumption of this study is that the Academy's computer processed the data and runs without error. A major threat is the possibility that the actual psychological profile of the players changed between the time they were tested and final team selection by the coaches two months later. The possibility of this occurrence will have to be considered when the models developed on this project are tested on the Class of 1976. In general the persistence of psychological factors is usually considered to be more than two months in duration and thus this threat, while possible - is not considered probable.

Another threat to the study is the assumption that the coaches are picking the right men. The analysis of this threat is beyond the scope of this project, though it is noted that the plebe team won all of its games but one.

CHAPTER V

CONCLUSIONS

Using a battery of four tests, the CWF 2, the AMI, the 16PF, and the MAT, sixty-eight psychological factors were measured for each individual in the class of 1975. Football players and non-football players were found to be significantly different from each other at the .05 level in the following psychological factors.

Table No. 22 - Comparison of Factors for Football Players and Non-Football Players

Significantly Higher for Football Players	Significantly Higher for Non-Football Players
Coachability	Shrewd
Mental Toughness	Self-Sufficient
Happy-Go-Lucky	Conscientious
Drive	Self-Sentiment
Self-Confidence	IQ (MAT)
Aggressiveness	Interest
Guilt Proneness	Intelligent (16PF)
	Imaginative
	Superego (unconscious)
	Superego (conscious)
	Superego (total motivation)
	Autism/Optism

Successful football players as a group are different at the .05 level from unsuccessful football players as a group in the following psychological factors, where success was measured by being selected to the final team. Table No. 23 presents this data on the next page.

Table No. 23 - Comparison of Factors for Successful and Unsuccessful Football Players (By Total Groups)

Significantly Higher for Football Players	Significantly Higher for Unsuccessful Players
Leadership	Home-Parental Sentiment
Assertive	Intelligence (16PF)
Emotionally Stable	
Self-Confidence	

By using a model for prediction of football success based on these factors the researcher found that 47.1% of those picked using the model matched the combined choices of the Academy's 10 coaches.

Successful football players, by position, are different at the .05 level from unsuccessful football players the the psychological factors listed in table No. 24. Success was determined by selection to the final team.

Table No. 24 - Comparison of Factors for Successful and Unsuccessful Football Players (By Position)

Significantly Higher for Successful Players	Significantly Higher for Unsuccessful Players
Assertive	Narcism/Comfort Drive (conscious)
Accuracy Score (AMI)	Happy-Go-Lucky
Self-Confidence	
Coachability	
Emotionally Stable	
Mating Drive (conscious)	

By using a model for prediction of football success based on these factors, the researcher found that 51.8% of those picked using the model matched the choices of the coaches.

A third model, using the predicted successful football players of the first and second models, indicated that 47.8% of those picked using this model matched the coaches' choices.

The factors isolated as being significantly different in the models proposed for predicting success in football should be verified in conjunction with the testing program of the Class of 1976.

RECOMMENDATIONS

Several areas for future research are recommended.

(1) An examination of reasons for the low correlations found between unconscious and conscious motivation factors, for the ten general motivation areas on the MAT.

(2) The determination of predictive models, using the test battery, to establish whether the model building approach developed on this project is applicable to other sports.

(3) Conduct a study, similar to this one, at other schools and/or other age levels to determine if the models in this study are applicable to other populations.

(4) Computer simulation of an infinite variety of model approaches involving variable weighting factors to determine whether the 51.8% prediction rate achieved in Model 2 can be increased.

APPENDIX A - TEST DESCRIPTIONS

CWF 2

The Cornell Word Form Test (CWF 2) was developed by the Cornell University Medical College for the rapid psychicatric assessment of large numbers of persons to contribute a descriptive sketch of the individual's adaptive and adjustment mechanisms in a manner not apparent to the subject. It has been found useful in situation where strong motivation might make responses to direct questions unreliable.

Primarily the CWF 2 has shown itself to be effective in indicating the presence of disturbance in adjustment, as exhibited in psychotic, psychoneurotic and relevant bodily reactions and diseases. Deviations from the average, or "normal" are reflected in the word form score, but the score does not ascertain what specific difficulties are involved. Thus, individuals with a variety of different manifestations of maladjustments may be found to have the same score. At the cut-off level of 10, 69% of 200 psychiatric male patients at the Neuropsychiatric Wards of St. Albans Naval Hospital scored 10 or more. Of 200 officer candidates at the Camp Lee, Va. Quartermaster School 4% scored 10 or more. Of the 1320 members of the Academy Class of 1975, 7.7% scored 10 or above.

AMI

Drive: Desire to win or be successful; competitive, likes to be challenged; winning is placed above other things; sets high goals for himself in athletics; aware of what he wants.

Self-Confidence: Sure of himself and of his ability; does not worry too much; handles unexpected situations well; does not show indecisiveness; speaks up for what he believes to coaches and players.

Aggressiveness: Often thinks it is necessary to be aggressive to win; easy for him to be aggressive; likes to argue; concerned about not getting pushed around; likes physical contact; speaks out when he is angry; wants to get back at people who beat him.

Coachability: Respects the coaches and accepts their advice; respect the training rules; accepts the leadership of the team captain, values coaching and considers it important to a good athlete, talks to the coach about his ideas for a game.

Determination: Sticks with things; does not give up easily; willing to practice long and hard; is one of the first out to practice and one of the last to leave; works on skills until he is exhausted; often works out by himself.

Emotionality: Mature and stable; not easily upset; not affected by his feelings; often does not let his feelings show; not easily depressed or frustrated by bad breaks, calls or mistakes; shows self-discipline.

Conscience Development: Conscientious; likes to do things as correctly as possible; does not try to bend the training rules to fit his own needs; places the good of the team above his personal well-being; is not late for practice; does not try to con his coach and fellow players.

Trust: Accepts people at face value; does not look for ulterior motives behind what others do or say; believes what the coaches or other players say to him; tends to get along well with his teammates.

Guilt Proneness: Accepts responsibility for his actions; willing to withstand much physical and mental pain; tends to dwell on his mistakes and to punish himself for them; will play hard even if he is injured; tends to take the blame even when it is not his fault

Leadership: Likes to influence his teammates to do things his way; likes to make decisions; likes to lead his teammates; is good at getting what he wants; probably wins most of the arguments he gets into; outspoken; takes charge of things.

Mental Toughness: Can take rough handling; does not get easily upset when losing, playing badly, or being spoken to harshly; accepts strong criticism without being hurt or getting upset; does not need too much encouragement from his coach.

16PF

RESERVED, Detached, Critical, Cool	vs.	OUTGOING, Warmhearted, Easy-going, Participating
LESS INTELLIGENT, Concrete-thinking (Lower scholastic mental capacity		MORE INTELLIGENT, Abstract-thinking, Bright
AFFECTED BY FEELINGS, Emotionally Less Stable, Easily Upset		EMOTIONALLY STABLE, Faces R Calm, Mature

HUMBLE, Mild, Accommodating, Conforming	vs.	ASSERTIVE, Independent, Aggressive, Stubborn
SOBER, Prudent, Serious, Taciturn		HAPPY-GO-LUCKY, Impulsively Lively, Gay, Enthusiastic
EXPEDIENT, Evades Rules, Feels Few Obligations		CONSCIENTIOUS, Persevering, Staid, Rulebound
SHY, Restrained, Diffident, Timid		VENTURESOME, Socially-bold, Uninhibited, Spontaneous
TOUGH-MINDED, Self-reliant, Realistic, No-nonsense		TENDER-MINDED, Over-protected, Sensitive
TRUSTING, Adaptable, Free of Jealousy, Easy to Get on With		SUSPICIOUS, Self-opionated, Hard to Fool
PRACTICAL, Careful, Conventional, Regulated by External Realities, Proper		IMAGINATIVEm Wrapped up in Inner Urgencies, Careless of Practical Matters, Bohemian
FORTHRIGHT, Natural, Artless, Sentimental		SHREWD, Calculating, Wordly, Penetrating
PLACID, Self-assured, Confident, Serene		APPREHENSIVE, Worrying, Depressive, Troubled
CONSERVATIVE, Respecting Established Ideas, Tolerant of Traditional Difficulties		EXPERIMENTING, Critical, Liberal, Analytical, Free-thinking
GROUP-DEPENDENT, A "Joiner" and Sound Follower		SELF-SUFFICIENT, Prefers Own Decisions, Resourceful
UNDISCIPLINED SELF-CONFLICT, Careless of Protocol, Follows Own Urges		CONTROLLED, Socially-precise, Following Self-image

RELAXED, Trainquil, Torpid, Unfrustrated	vs.	TENSE, Frustrated, Driven, Overwrought
LOW ANXIETY *		HIGH ANXIETY *
INTROVERSION *		EXTRAVERSION *
TENDERMINDED EMOTIONALITY *		ALERT POISE *
SUBDUEDNESS *		INDEPENDENCE *

* Consult the 16PF Handbook for detailed definitions.

MAT

ERG - A drive or source of reactive energy directed toward a particular goal.

SENTIMENT - An acquired aggregate of attitudes, built up by learning and social experience. Like an erg it is a source of motivation and interest.

CAREER sentiment - Amount of development of interests in a career.

HOME-PARENTAL sentiment - Strength of attitudes attaching to the parental home.

FEAR erg - Level of alertness to external dangers.

NARCISM-COMFORT erg - Level of drive to sensuous, self-indulgent satisfactions.

SUPEREGO sentiment - Strength of development of conscience.

SELF-CONCEPT sentiment - Level of concern about the self-concept, social repute.

MATING erg - Strength of the normal, heterosexual or mating drive.

PUGNACITY-SADISM erg - Strength of destructive, hostile impulses.

ASSERTIVENESS erg - Strength of the drive to self-assertion, mastery, and achievement.

SWEETHEART-SPOUSE sentiment - Strength of attachment to wife(husband)/ sweetheart.

See the MAT Handbook for descriptions of other Factors.

APPENDIX B - CORRELATION PROGRAM

```
100 DIM M(68,68),C(68),D(68),E(68),R(68),S(68),T(68),X(68)
110 DIM A(80)
120 FILE #1:"TRIDENT"
130 PRINT "GIVE THE FIRST BUNCH."
140 MAT INPUT R
150 LET R9=NUM
160 PRINT "GIVE THE SECOND BUNCH."
170 MAT INPUT C
180 LET C9=NUM
190 LINPUT #1:A$
200 CHANGE A$ TO A
210 FOR I=1 TO R9
220 LET B=R(I)
230 LET B9=+1
240 GOSUB 770
250 IF B9<0 THEN 540
260 NEXT I
270 FOR J=1 TO C9
280 LET B=C(J)
290 LET B9=+1
300 GOSUB 770
310 IF B9<0 THEN 540
320 NEXT J
400 FOR I=1 TO R9
410 LET S(I)=S(I)+X(R(I))
420 LET T(I)=T(I)+X(R(I))^2
430 NEXT I
440 FOR J=1 TO C9
450 LET D(J)=D(J)+X(C(J))
460 LET E(J)=E(J)+X(C(J))^2
470 NEXT J
480 FOR I=1 TO R9
490 FOR J=1 TO C9
500 LET M(I,J)=M(I,J)+X(R(I))*X(C(J))
510 NEXT J
520 NEXT I
530 LET N=N+1
540 IF MORE #1 THEN 190
550 PRINT
560 PRINT "NUMBER","MEAN","STANDARD DEVIATION"
570 FOR I=1 TO R9
580 LET S(I)=S(I)/N
590 LET T(I)=SQR(T(I)/N-S(I)^2)
600 PRINT R(I),S(I),T(I)
610 NEXT I
620 FOR J=1 TO C9
630 LET D(J)=D(J)/N
640 LET E(J)=SQR(E(J)/N-D(J)^2)
650 PRINT C(J),D(J),E(J)
660 NEXT J
```

CARREL (CONTINUED)

```
670 PRINT
680 PRINT "NUMBER","NUMBER","CORRELATION"
690 FOR I=1 TO R9
700 FOR J=1 TO C9
710 LET M(I,J)=(M(I,J)/N-S(I)*D(J))/(T(I)*E(J))
720 PRINT R(I),C(J),M(I,J)
730 NEXT J
740 PRINT
750 NEXT I
760 STOP
770 IF B<>1 THEN 810
780 IF SEG$(A$,9,10)="  " THEN 930
790 LET X(B)=VAL(SEG$(A$,9,10))
800 GO TO 920
810 IF B>14 THEN 840
820 LET X(B)=A(B+10)
830 GO TO 880
840 IF B>34 THEN 870
850 LET X(B)=A(B+11)
860 GO TO 880
870 LET X(B)=A(B+12)
880 IF X(B)=ASC( ) THEN 930
890 LET X(B)=X(B)-ASC(0)
900 IF X(B)<>0 THEN 920
910 LET X(B)=10
920 RETURN
930 LET B9=-1
940 RETURN
999 END
```

Appx. No. C - SAMPLE CARREL RUN

NUMBER	MEAN	STANDARD DEVIATION
25	5.75265	1.83719
26	4.80787	1.93838
27	5.3472	1.9373
28	5.51362	1.81318
29	7.06959	1.97519
30	4.93797	2.09367
43	5.79274	1.78267
44	6.70575	1.94254
45	5.14297	1.72065
46	5.13162	1.6903
47	4.95915	1.93107
48	5.73903	1.73008

NUMBER	NUMBER	CORRELATION
25	43	-.02
25	44	-.04
25	45	.05
25	46	.05
25	47	-.01
25	48	-.03
26	43	-.04
26	44	.07
26	45	-.01
26	46	-.01
26	47	.04
26	48	-.06
27	43	.08
27	44	.09
27	45	-.04
27	46	-.17
27	47	.08
27	48	.08
28	43	-.01
28	44	.04
28	45	-.00
28	46	.02
28	47	.06
28	48	.04

NUMBER	NUMBER	CORRELATION
29	43	.04
29	44	-.18
29	45	.04
29	46	.08
29	47	-.05
29	48	-.04
30	43	-.06
30	44	.17
30	45	-.00
30	46	.02
30	47	.01
30	48	-.04

Appx. No. D - AMI CORRELATION COEFFICIENTS

										Factor #'s			FACTORS
												14	Strength of Score
											13	-.11	Accuracy Measure
										12	-.07	.29	Mental Toughness
									11	.26	.08	.30	Leadership
								10	.19	.12	.02	.34	Guilt Proneness
							9	09	.10	.40	.06	.37	Trust
						8	.47	.34	.26	.35	.06	.55	Conscience Development
					7	.48	.52	.07	.33	.57	.05	.41	Emotionalit
				6	49	.58	.33	.33	.44	.38	.06	.50	Determinat
			5	.44	37	.43	.27	.23	.39	.29	.07	39	Coachabili
		4	.09	.14	.04	-.00	-.20	.35	.24	.13	-.00	.08	Aggressive
	3	.24	.40	.55	.56	.39	.28	.20	.60	.48	-.02	.41	Self Conf
2	.46	.41	.32	.48	.24	.37	.10	.45	.43	.20	-.09	.42	Drive

VARIAN2

APPENDIX E - ANALYSIS OF VARIANCE PROGRAM

```
1 REM THIS IS A PROGRAM WHICH ANALIZES THE VARIANCE OF TWO GROUPS
2 REM OF DIFFERENT SIZES. THE MAXIMUM NUMBER OF (TWO GROUP) SETS OF
3 REM STATISTICS IS 100.
4 REM                          BY DOUGLAS C. GILBERT    31 JANUARY 1972
5 PRINT "INPUT THE NAMES OF THE FILES IN QUOTATIONS";
10 INPUT N$,M$
13 PRINT
15 PRINT "INPUT THE NUMBER OF ROWS OF DATA IN ";N$;" AND ";M$;" CONSECU
16 PRINT "AND THE NUMBER OF COLUMNS CONTAINING TEST SCORES"
20 INPUT C1,C2,R1
190 DIM X(100), S(100), T(100), U(100),V(100), H(100), O(100)
195 DIM K(100), L(100), C(100), E(100), Q(100), R(100), F(100)
197 DIM W(100), Y(100), Z(100), D(100)
220 FILE #1:N$
230 FILE #2:M$
240 FOR I=1 TO C1
245 LINPUT #1:A$
250 LET X(1)=VAL(SEG$(A$,9,10))
260 FOR J=12 TO 24
270 LET X(J-10)=VAL(SEG$(A$,J,J))
275 IF X(J-10)=0 THEN 285
280 NEXT J
282 GO TO 290
285 LET X(J-10)=10
287 GO TO 280
290 FOR J=26 TO 45
300 LET X(J-11)=VAL(SEG$(A$,J,J))
305 IF X(J-11)=0 THEN 313
310 NEXT J
312 GO TO 320
313 LET X(J-11)=10
315 GO TO 310
320 FOR J=47 TO 80
330 LET X(J-12)=VAL(SEG$(A$,J,J))
335 IF X(J-12)=0 THEN 343
340 NEXT J
342 GO TO 350
343 LET X(J-12)=10
345 GO TO 340
350 FOR J= 1 TO R1
360 LET S(J)=S(J)+X(J)
370 LET U(J)=U(J)+X(J)*X(J)
380 NEXT J
390 NEXT I
400 FOR I=1 TO C2
405 LINPUT #2:A$
410 LET X(1)=VAL(SEG$(A$,9,10))
420 FOR J=12 TO 24
430 LET X(J-10)=VAL(SEG$(A$,J,J))
435 IF X(J-10)=0 THEN 445
```

VARIAN2 (CONTINUED)

```
440 NEXT J
442 GO TO 450
445 LET X(J-10)=10
447 GO TO 440
450 FOR J=26 TO 45
478 LET T(Q)=(H(Q))^2
500 LET X(J-11)=VAL(SEG$(A$,J,J))
505 IF X(J-11)=0 THEN 515
510 NEXT J
512 GO TO 520
515 LET X(J-11)=10
517 GO TO 510
520 FOR J=47 TO 80
530 LET X(J-12)=VAL(SEG$(A$,J,J))
535 IF X(J-12)=0 THEN 545
540 NEXT J
542 GO TO 550
545 LET X(J-12)=10
547 GO TO 540
550 FOR J=1 TO R1
560 LET T(J)=T(J)+X(J)
570 LET V(J)=V(J)+X(J)*X(J)
580 NEXT J
590 NEXT I
600 LET C3=C1+C2
610 FOR J=1 TO 68
620 LET H(J)=T(J)+S(J)
630 LET O(J)=U(J)+V(J)
640 LET K(J)=H(J)*H(J)/C3
650 LET L(J)=O(J)-K(J)
660 LET C(J)=S(J)*S(J)/C1 +T(J)*T(J)/C2 - H(J)*H(J)/C3
670 LET E(J)=O(J)-S(J)*S(J)/C1-T(J)*T(J)/C2
680 LET D1=1
690 LET D2=C3-2
700 LET D3=C3-1
710 LET Q(J)=C(J)/D1
720 LET R(J)=E(J)/D2
730 LET F(J)= Q(J)/R(J)
740 LET W(J)=S(J)/C1
750 LET Y(J)=T(J)/C2
760 LET Z(J)=(1/(C1-1))*(U(J)-C1*W(J)*W(J))
770 LET Z(J)=SQR(Z(J))
780 LET D(J)=(1/(C2-1))*(V(J)-C2*Y(J)*Y(J))
790 LET D(J)=SQR(D(J))
795 NEXT J
796 PRINT
797 PRINT
798 PRINT
800 PRINT "             MEAN";"                    STANDARD DEVIATION"
810 PRINT "TEST "; "GROUP#1", "GROUP#2", "GROUP#1", "GROUP#2", "r"
```

VARIAN2 (CONTINUED)

```
815 PRINT
820 FOR J=1 TO 9
825 LET C9=C9+1
830 PRINT J;"  "; W(J), Y(J), Z(J), D(J), F(J)
832 IF C9=5 THEN836
834 NEXT J
835 GO TO 839
836 PRINT
837 LET C9=0
838 GO TO 834
839 LET J=10
840 PRINT J;"  "; W(J), Y(J), Z(J), D(J), F(J)
841 PRINT
842 LET C9=0
843 FOR J=11 TO R1
844 LET C9=C9+1
850 PRINT J;"  "; W(J), Y(J), Z(J), D(J), F(J)
852 IF C9=5 THEN 857
855 NEXT J
856 GO TO 905
857 PRINT
858 LET C9=0
859 GO TO 855
905 PRINT
906 PRINT
910 PRINT "      DEGREES OF FREEDOM"
915 PRINT
920 PRINT "AMONG COLUMNS (V1)", D1
930 PRINT "ERROR WITHIN (V2)", D2
940 PRINT "TOTAL",,D3
950 END
```

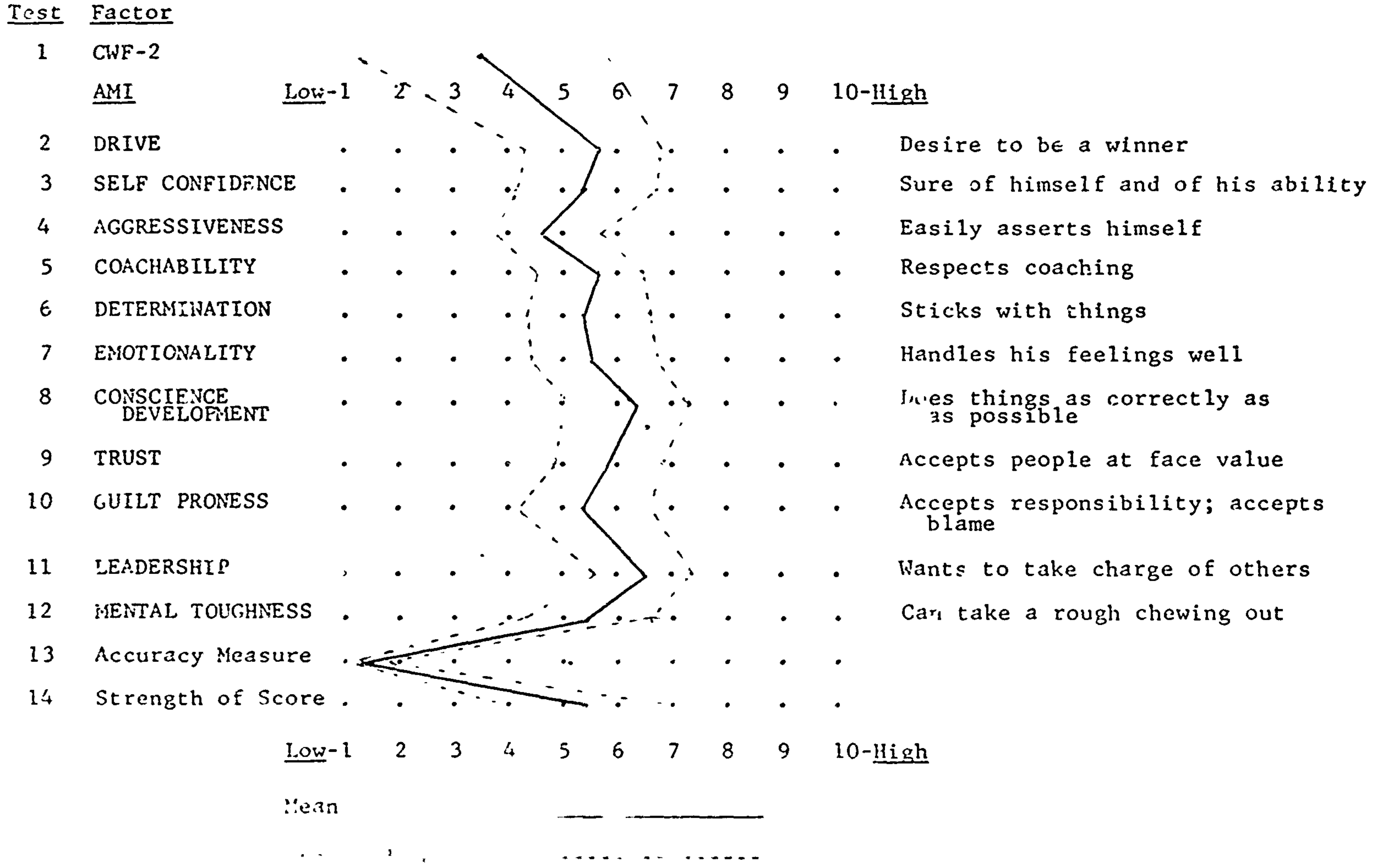
Appx. No. F - SAMPLE VARIAN2 PRINTOUT

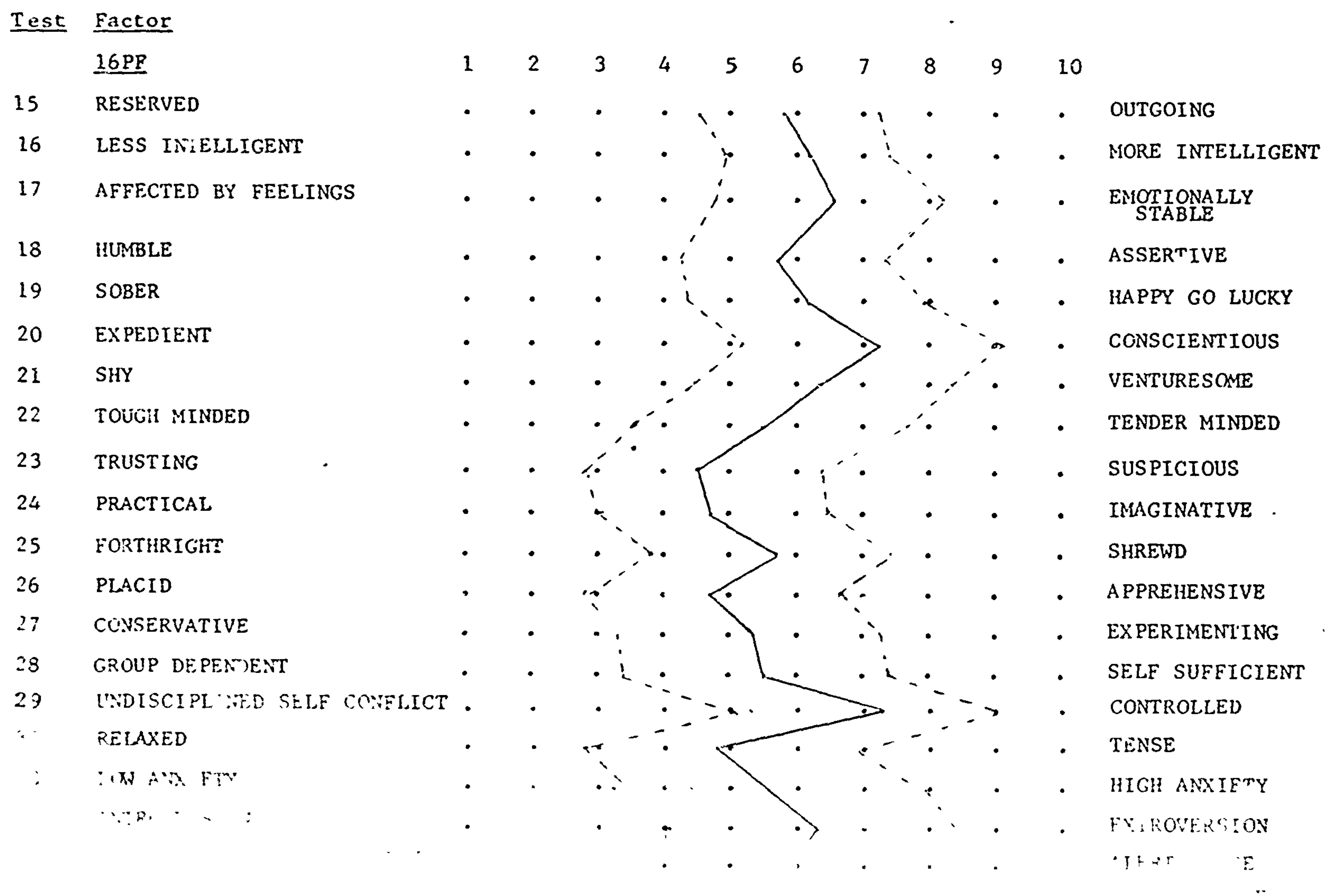
	MEAN		STANDARD DEVIATION		
TEST	GROUP #1	GROUP #2	GROUP #1	GROUP #2	F
1	4.06612	4.72581	3.31409	4.13767	1.75729
2	6.1281	6.35484	1.34354	1.33179	1.41064
3	5.95868	6.62903	1.80776	1.69119	6.96225
4	5.47934	5.74194	1.58624	1.55696	1.36268
5	5.80992	5.96774	1.25446	1.22766	0.787938
6	5.3843	5.6129	1.72276	1.77741	0.857913
7	5.63223	5.98387	1.74312	1.73197	2.0137
8	6.19835	6.40323	1.68528	1.74111	0.71964
9	5.94215	6.1129	1.52325	1.48329	0.626759
10	5.6405	5.87097	1.44573	1.50936	1.2319
11	6.48347	6.79032	1.3332	1.18926	2.72669
12	5.76033	5.98387	1.55947	1.6144	0.999649
13	1.09091	1.16129	0.315571	0.370801	2.27972
14	5.50413	5.62903	0.969442	0.891377	0.845649
15	6.00413	5.91935	1.87912	1.92736	0.10
16	5.84298	5.24194	1.80598	1.93912	5.30283
17	6.63223	7.14516	1.91983	1.83631	2.37287
18	5.7686	6.14516	1.68597	1.83631	2.37287
19	6.28099	6.33871	1.77218	1.87252	0.05
20	6.80165	6.70968	1.88296	1.98674	0.115125
21	6.22727	6.29032	1.77406	1.48641	0.07
22	5.48347	5.54839	1.84956	1.7987	0.06
23	4.52066	4.45161	1.88287	1.85258	0.07
24	4.53306	4.48387	1.69969	1.72486	0.041085
25	5.59504	5.3871	1.77385	1.80486	0.673462
26	4.76033	4.85484	1.89134	1.75412	0.126816
27	5.5	5.3871	1.93301	2.12213	0.161673
28	5.29339	5.37097	1.71177	1.63199	0.103275
29	7.00826	7.19355	1.90433	1.9656	0.461132
30	4.78926	4.51613	2.12499	2.12512	0.815342
31	4.42562	4.43548	2.22878	2.17754	0.00
32	6.28926	6.48387	1.9019	1.91407	0.515447
33	6.01653	6.08065	1.60644	1.61244	0.078503
34	4.92149	5.01613	1.95755	2.04452	0.113286
35	5.29339	5.22581	1.60674	1.81451	0.08
36	5.58678	5.32258	2.00692	1.84457	0.883009

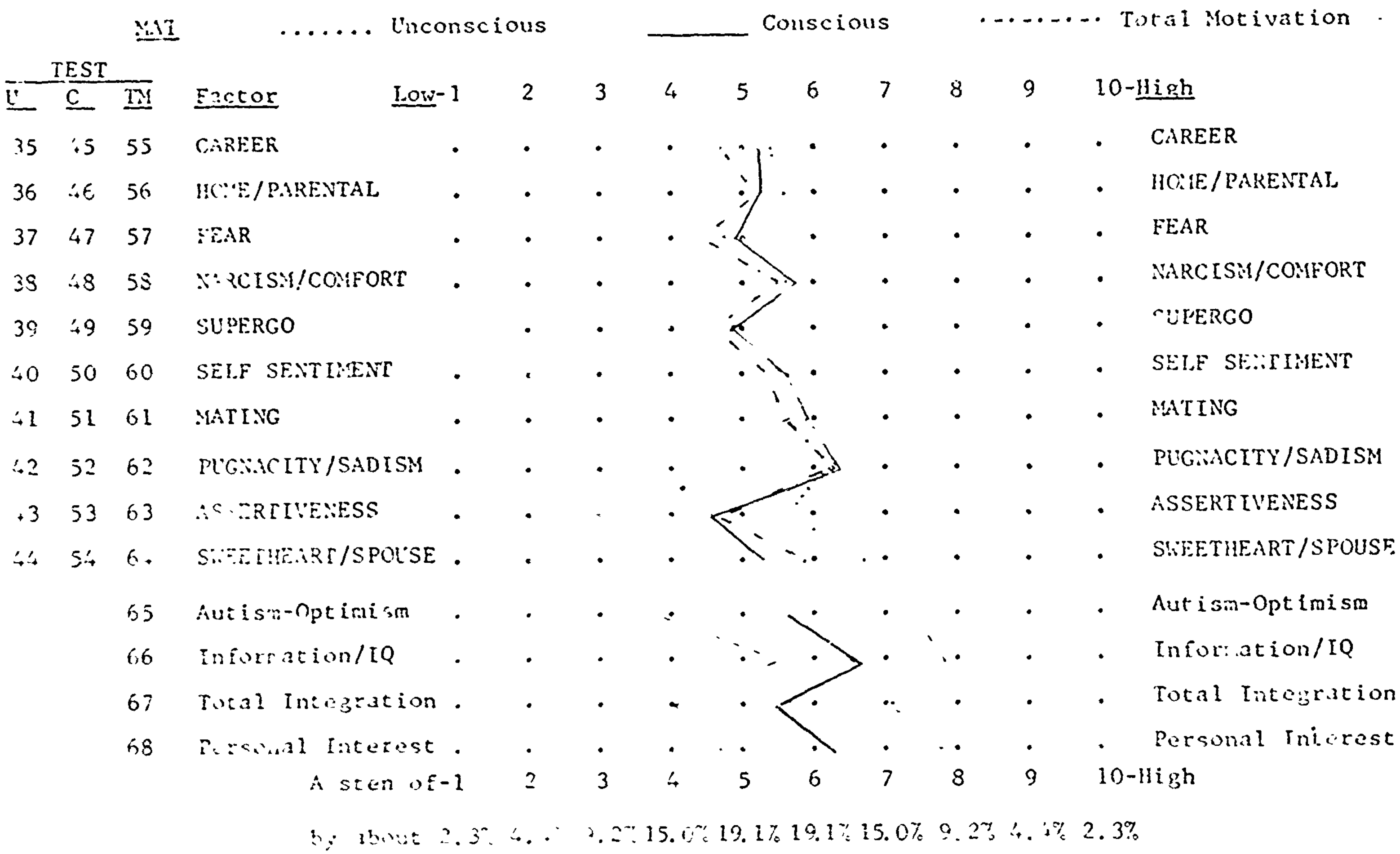
TEST	MEAN GROUP #1	MEAN GROUP #2	STANDARD DEVIATION GROUP #1	STANDARD DEVIATION GROUP #2	F
37	471074	437097	2.04082	1.9772	1.38525
38	5.45041	5.29032	1.84897	1.7869	0.375003
39	4.85537	4.82258	1.82416	1.96297	0.02
40	5.27686	5.40323	1.65041	1.58331	0.294074
41	5.62397	5.74194	1.75559	1.89854	0.215476
42	5.94628	5.87097	2.12113	1.94586	0.06
43	5.69421	5.74194	1.75392	1.9664	0.03
44	6.78099	6.90323	1.9553	1.799	0.19905[illegible]
45	5.07851	5	1.84853	1.73678	0.09
46	5.00826	4.72581	1.78279	1.61112	1.28654
47	5.02893	5	1.92256	2.08822	0.01
48	5.82231	5.58065	1.67896	1.86906	0.9754[illegible]
49	4.77273	4.77419	1.72665	1.70264	0.00
50	5.38843	5.3871	1.38379	1.17842	0.00
51	6.07851	6.17742	1.8664	1.96297	0.135695
52	6.30579	6.45161	1.73728	1.72425	0.348809
53	4.67355	4.87097	1.91653	1.92042	0.523243
54	5.15289	4.8871	1.7867	1.98441	1.04306
55	4.64876	4.48387	2.36077	2.43433	0.237737
56	5.02893	4.51613	2.35518	2.07832	2.4492[illegible]
57	4.44215	4.14516	2.76739	2.92444	0.0555326
58	5.40909	4.91935	2.60107	2.58177	1.754[illegible]
59	4.11157	4.12903	2.37727	2.25057	0.00
60	4.8595	5.03226	2.05043	1.73647	0.371[illegible]
61	5.66529	5.83871	2.41356	2.51679	0.250392
62	6.07851	6.09677	2.63042	2.47419	0.00
63	4.44628	4.72581	2.45102	2.48385	0.63844[illegible]
64	5.91975	5.77419	2.53752	2.77234	0.178[illegible]
65	5.32231	5.25806	1.85452	1.846	0.06
66	6.54132	6.37097	1.17032	1.10489	1.06923
67	5.61157	5.6129	1.57981	1.52954	0.00
68	6.0124	5.77419	1.4787	1.43057	1.297[illegible]

DEGREES OF FREEDOM	
AMONG COLUMNS (VI)	1
ERROR WITHIN (V2)	302
TOTAL	303

Appx. No. G TRID 1 Profile - Class of 1975

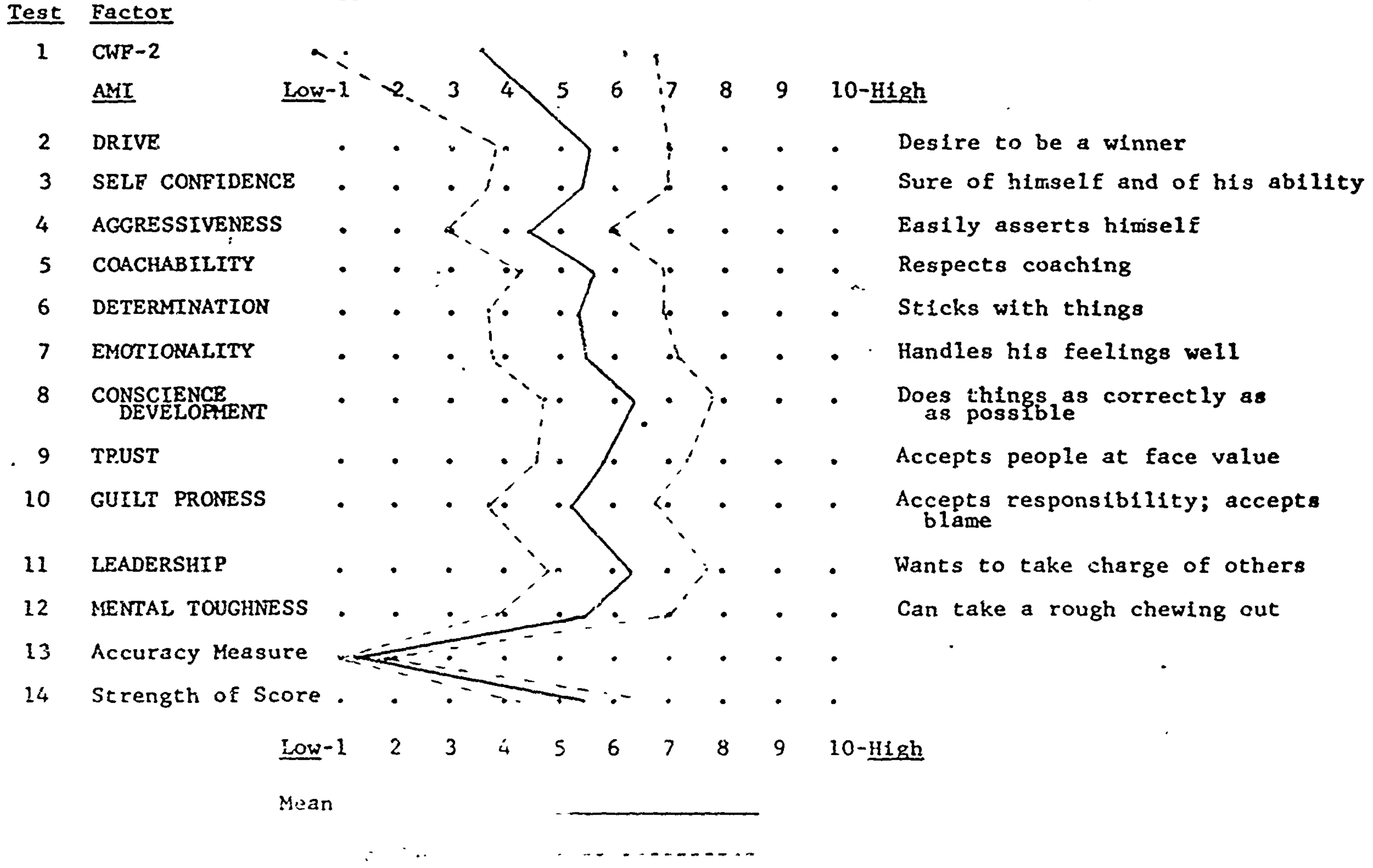


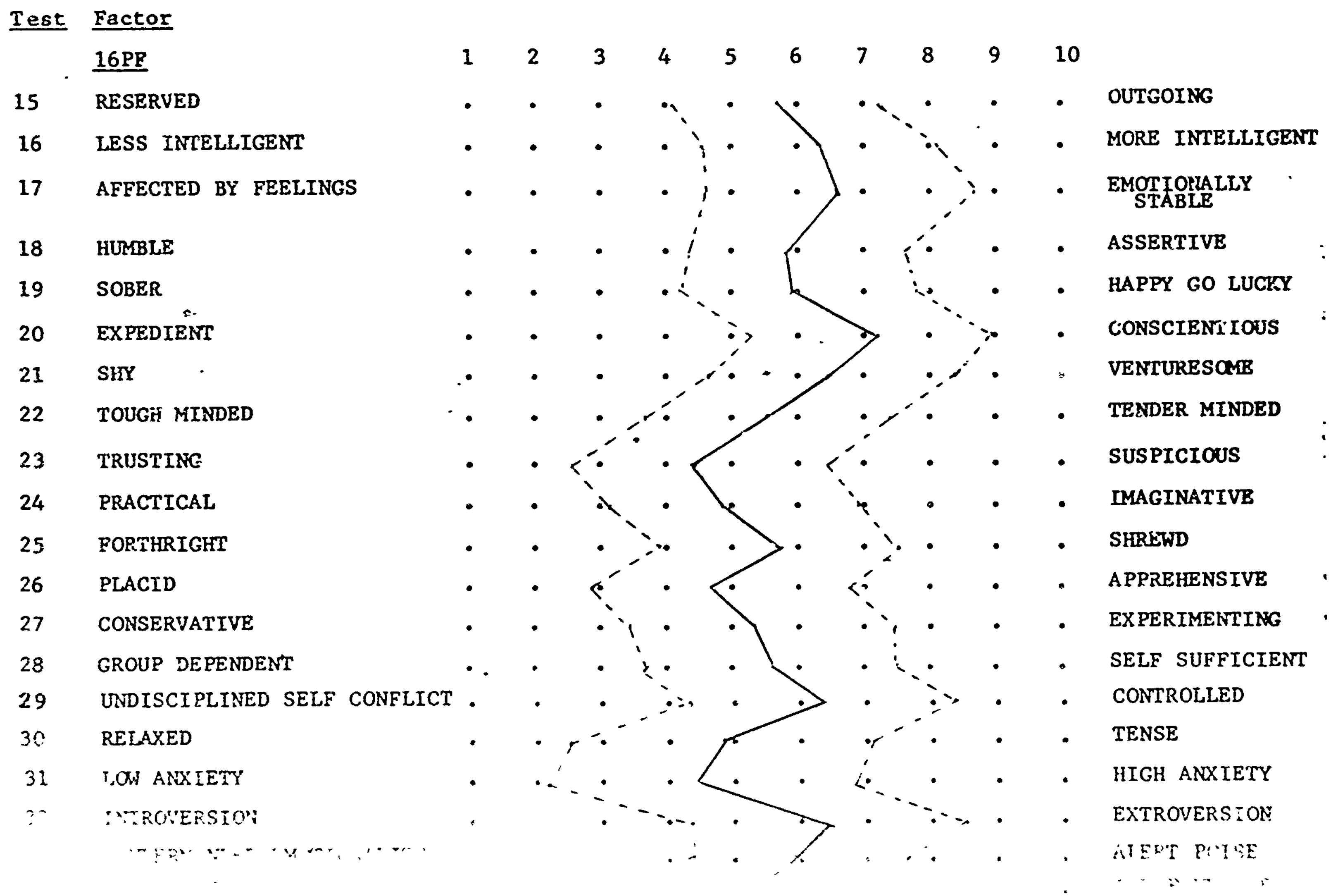

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UNDISCIPLINED SELF CONFLICT
CONTROLLED
RELAXED
TENSE
LOW ANXIETY
HIGH ANXIETY
EXTROVERSION

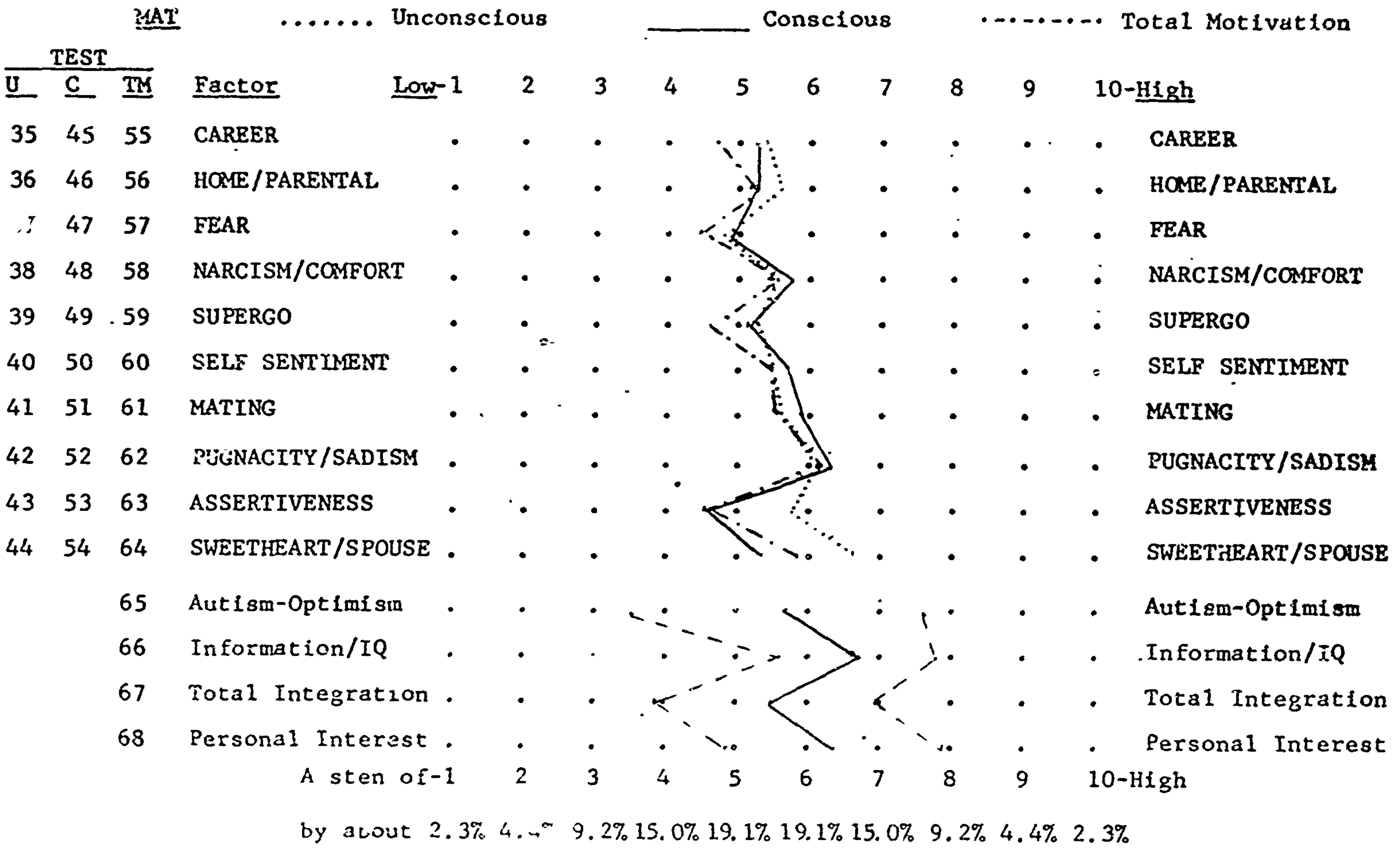


[illegible] with standard [illegible] scores for the [illegible] "conscious" [illegible]

Appx. No. H TRID 2 Profile - Non-Football Players



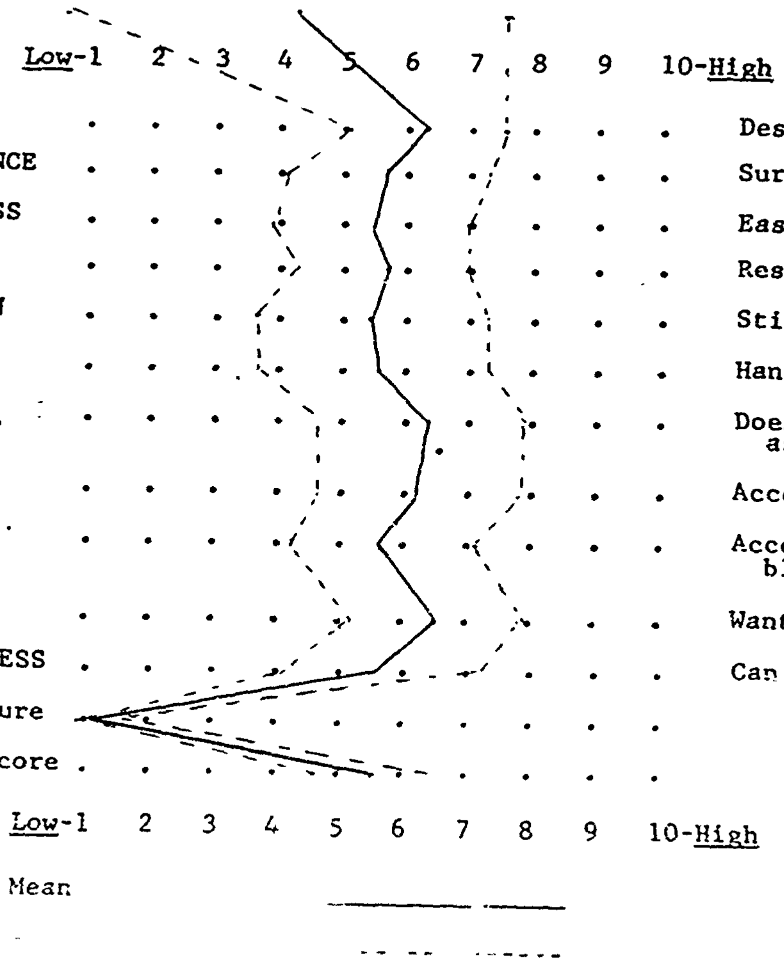

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UNDISCIPLINED SELF CONFLICT
CONTROLLED
30
RELAXED
TENSE
31
LOW ANXIETY
HIGH ANXIETY
32
INTROVERSION
EXTROVERSION
ALERT POISE

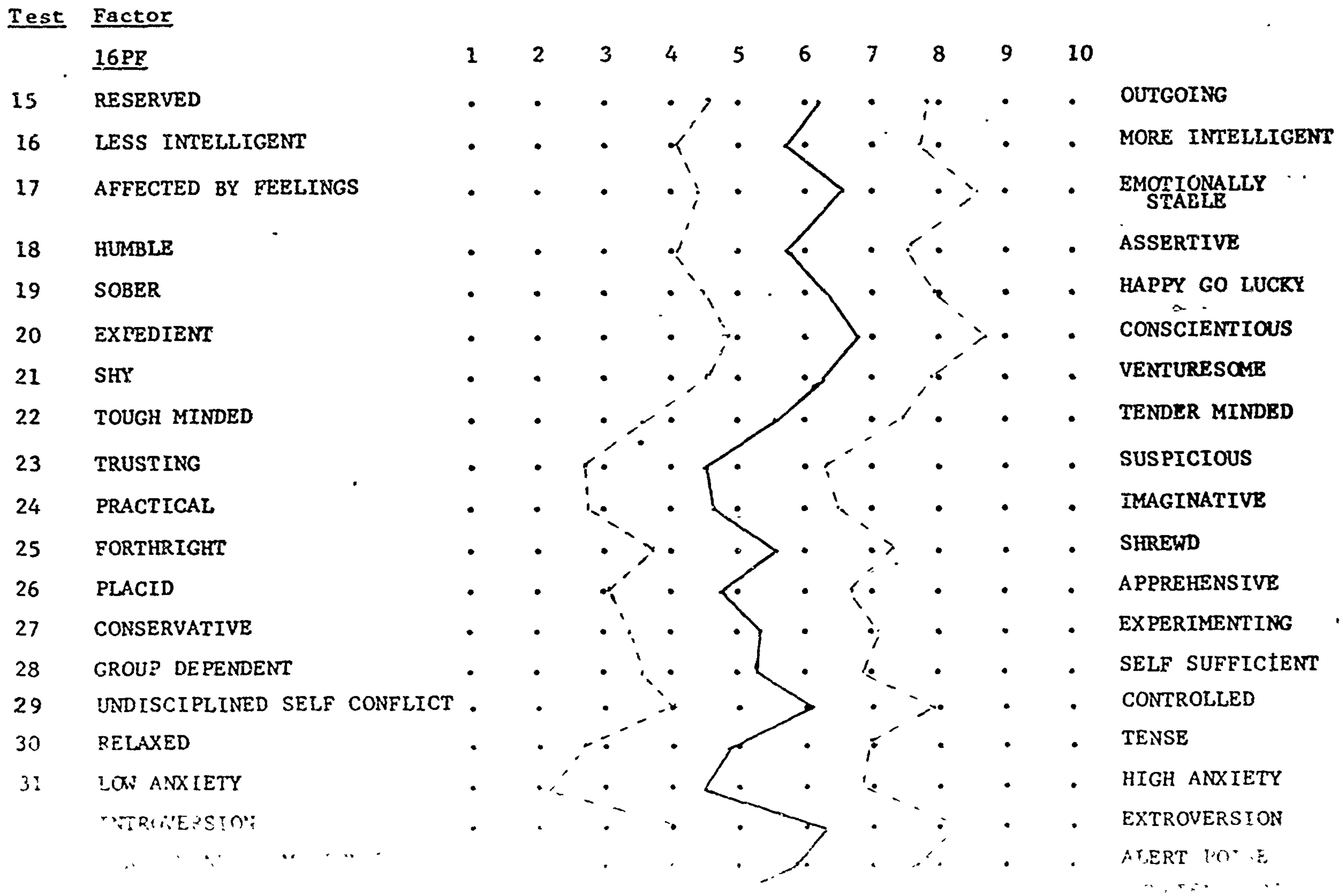


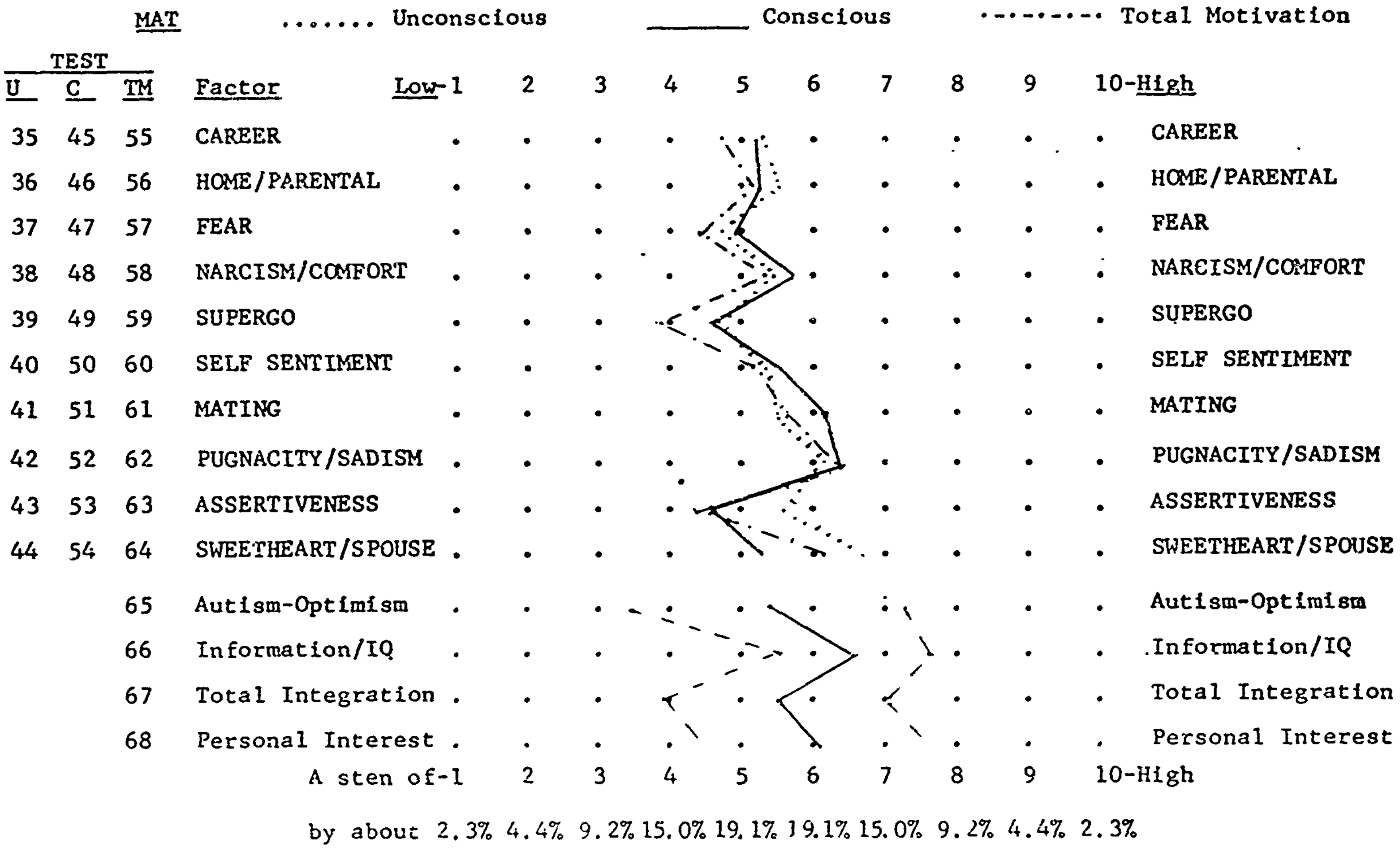
[illegible] score with standard deviation scores for the [illegible] for the "cons[illegible]"

Appx. No. I TRID 3 Profile - First Day Football Turnout

Test	Factor	
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing cut
13	Accuracy Measure	
14	Strength of Score	

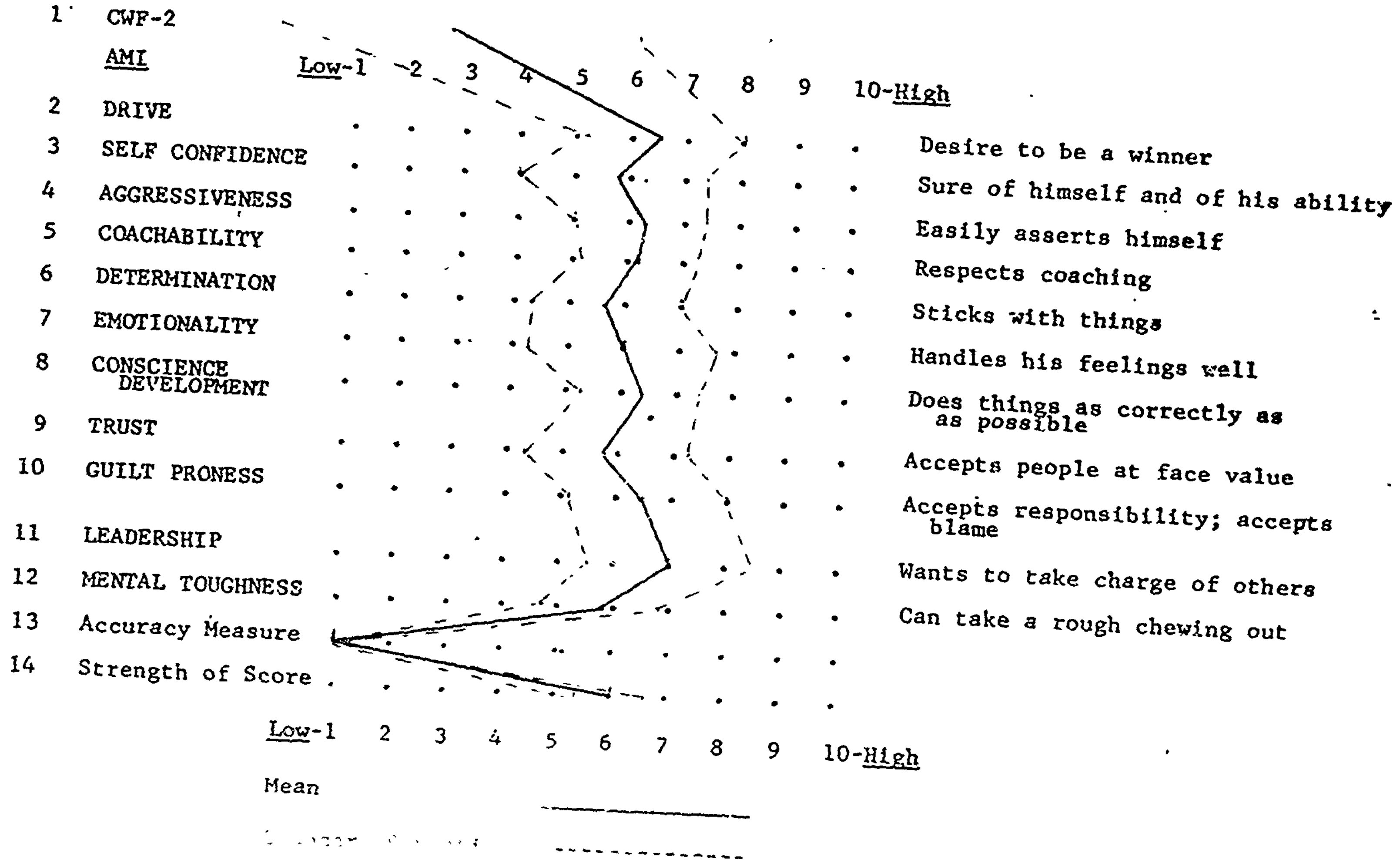


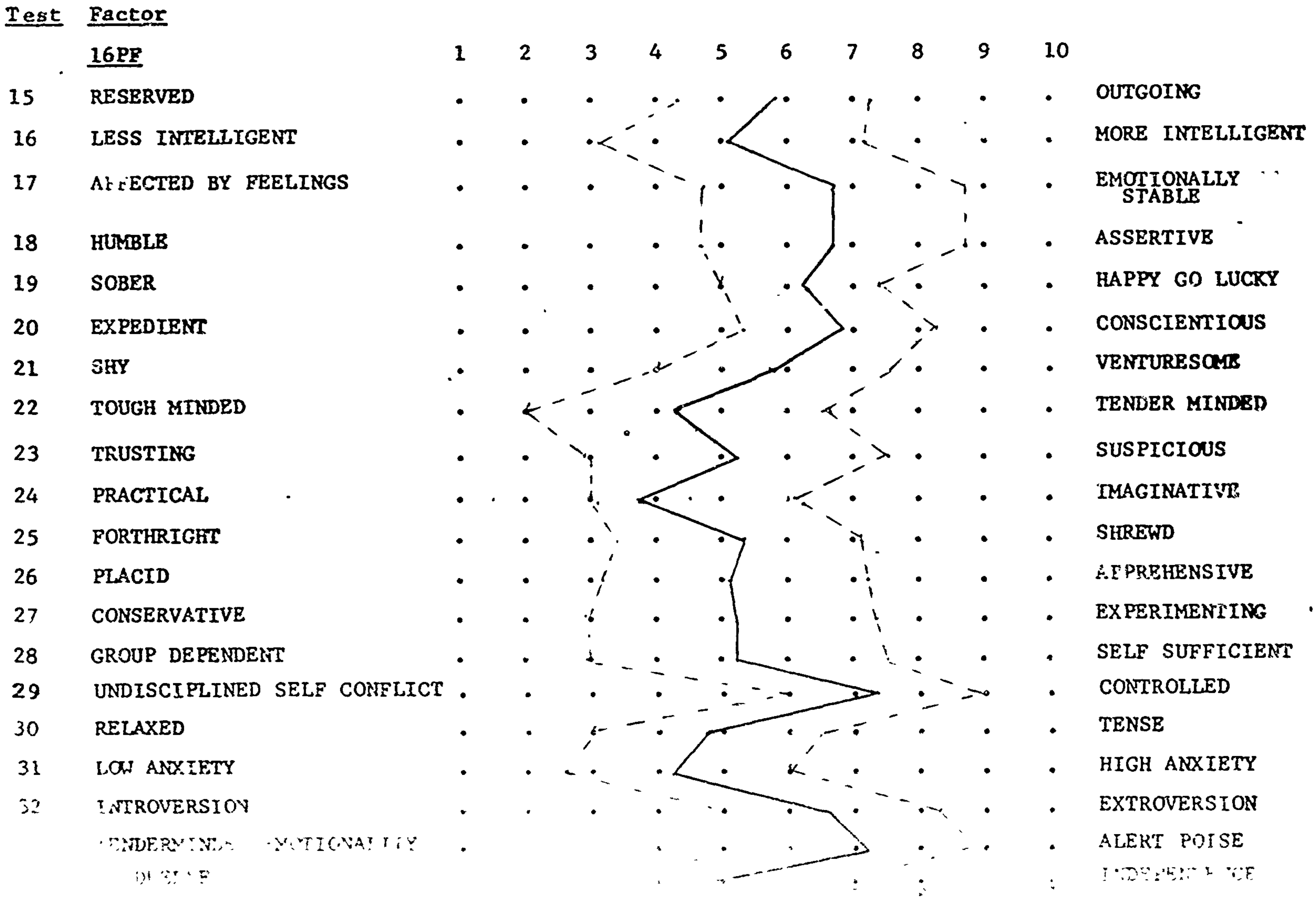

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UNDISCIPLINED SELF CONFLICT
CONTROLLED
30
RELAXED
TENSE
31
LOW ANXIETY
HIGH ANXIETY
INTROVERSION
EXTROVERSION
ALERT POISE

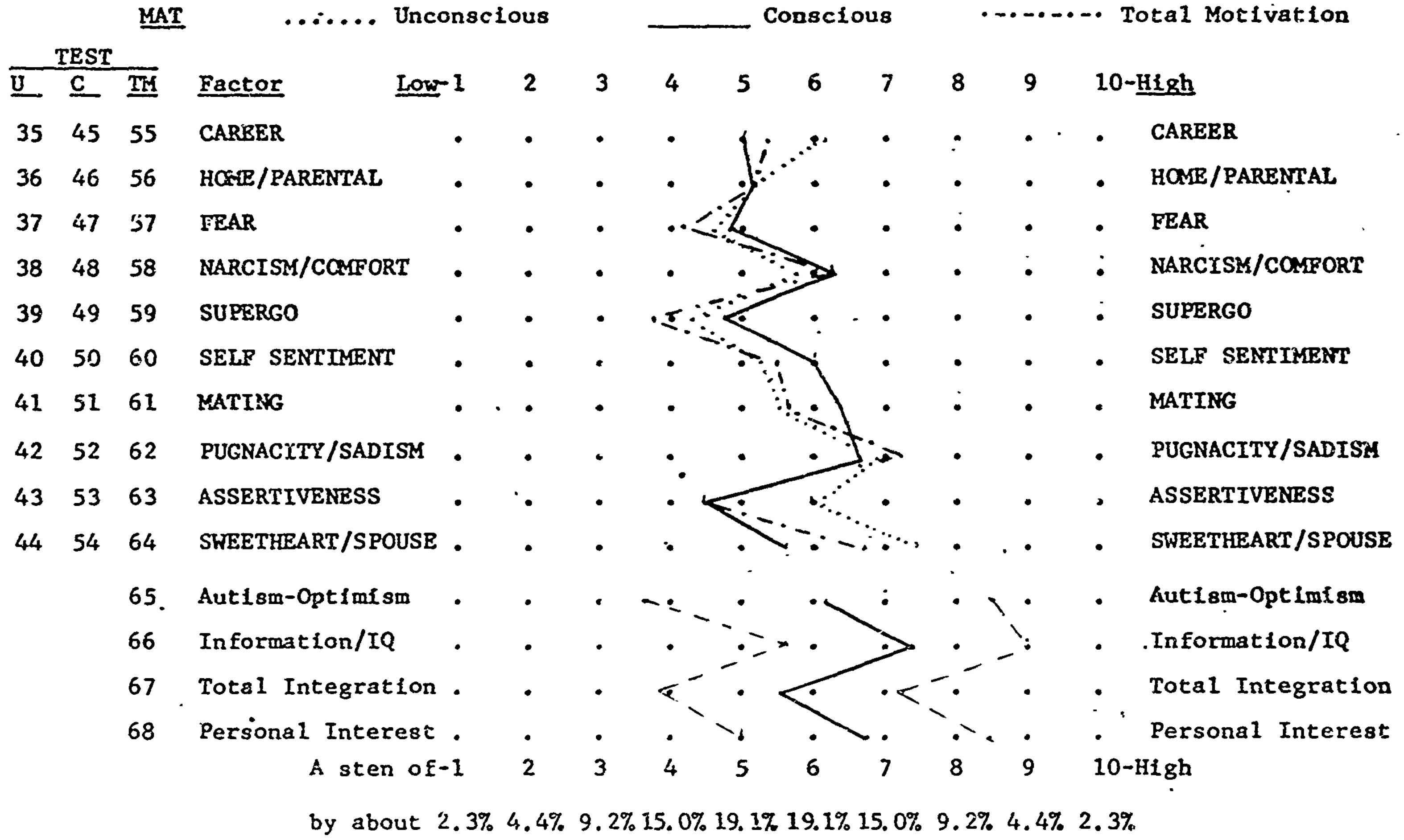


The above profile represents [illegible] scores with standard deviation scores for the [illegible] "[illegible]cious" scores in table [illegible] for the "conscious"

Appx. No. J TRID 4 Profile - All Centers

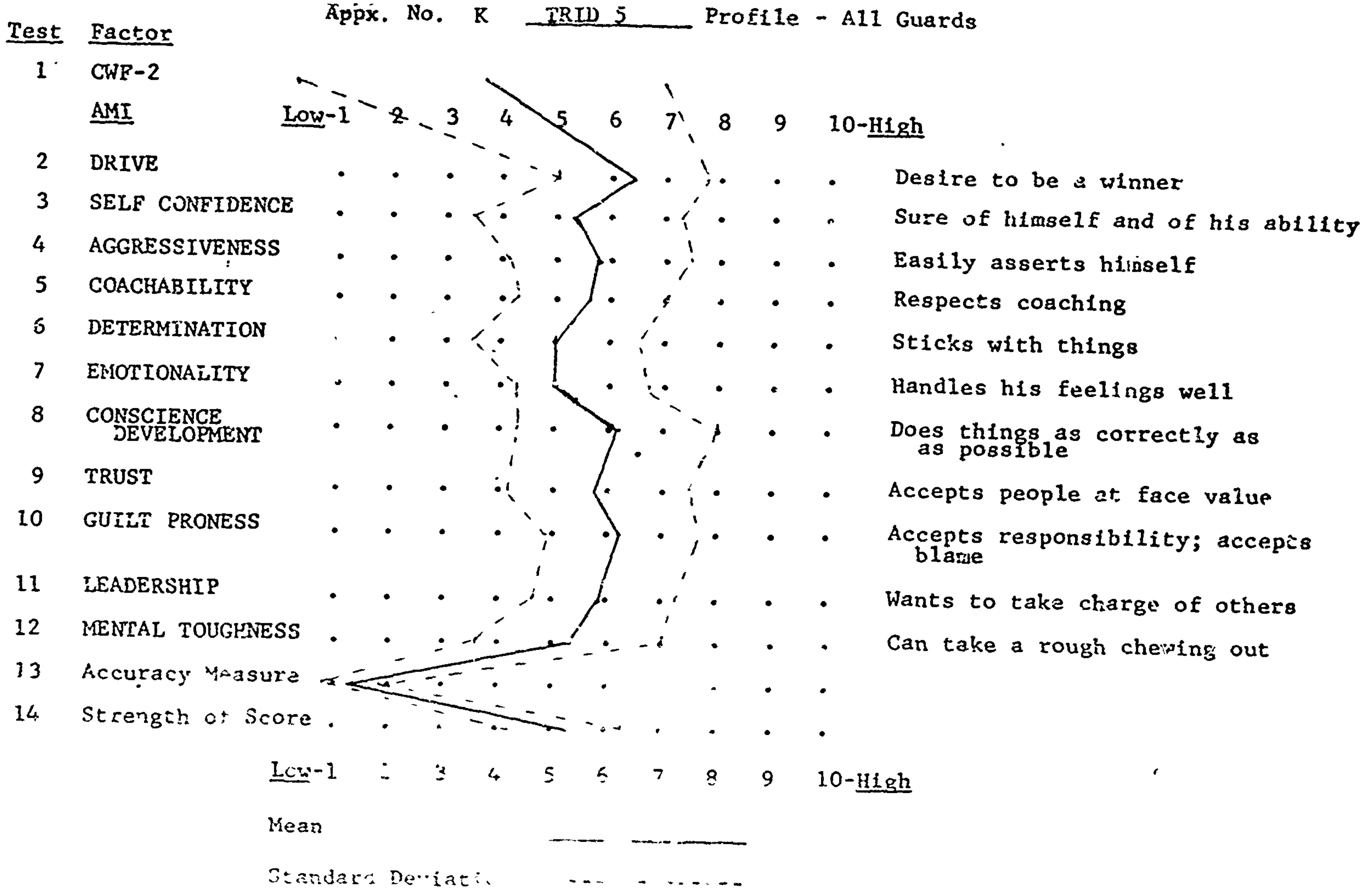


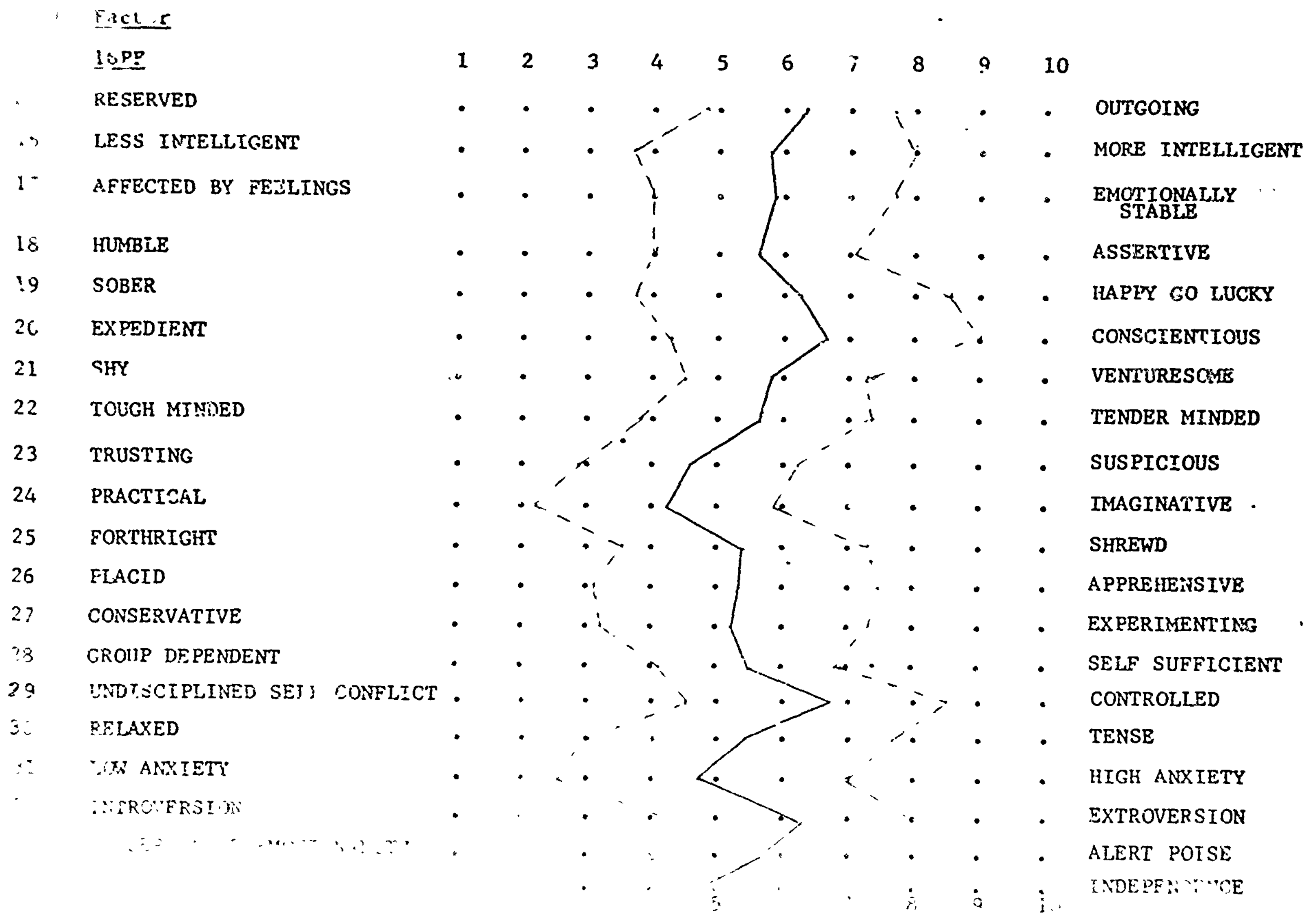

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UNDISCIPLINED SELF CONFLICT
CONTROLLED
30
RELAXED
TENSE
31
LOW ANXIETY
HIGH ANXIETY
32
INTROVERSION
EXTROVERSION
TENDERMINDED EMOTIONALITY
ALERT POISE
DEPENDENCE
INDEPENDENCE

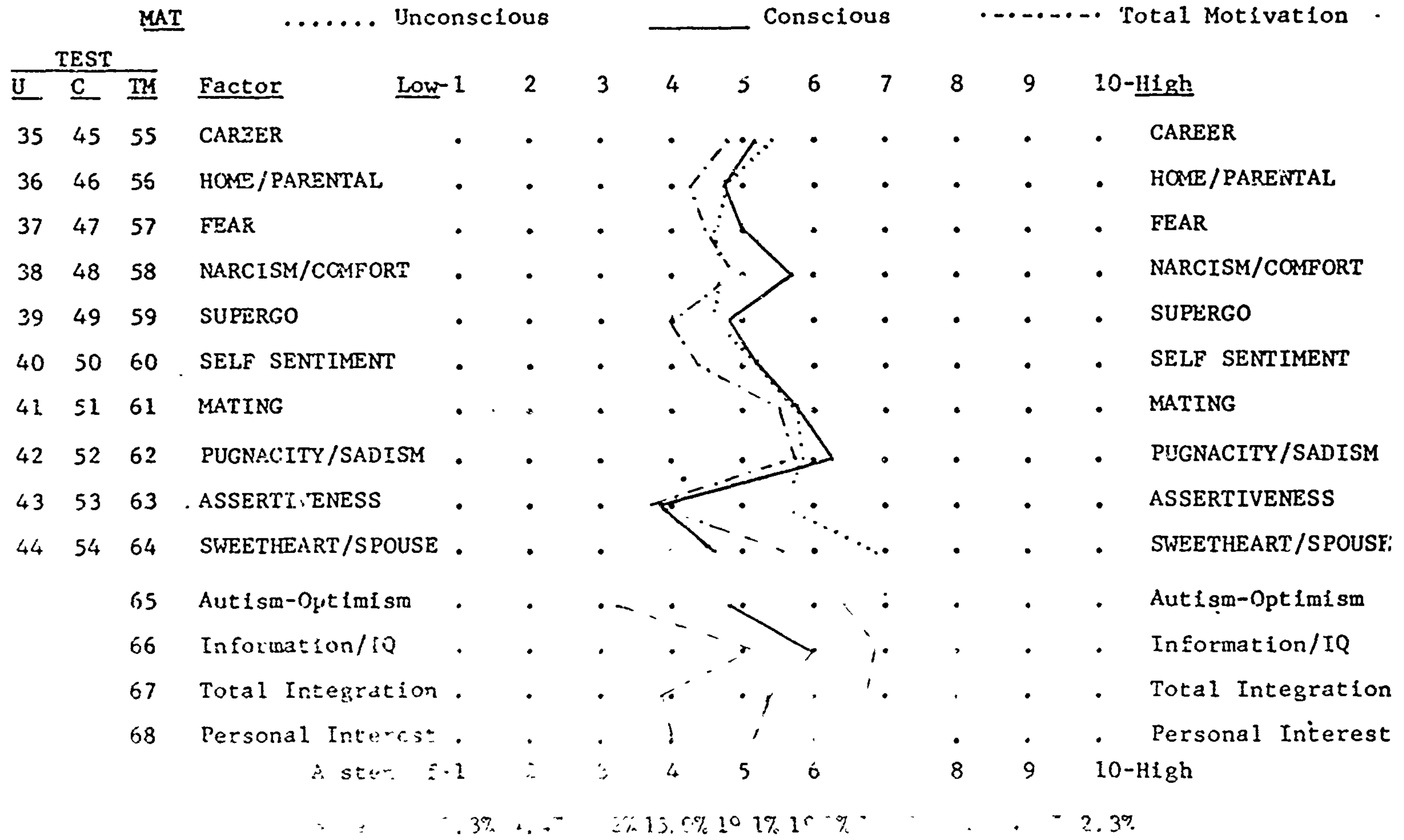


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appx. No. K TRID 5 Profile - All Guards



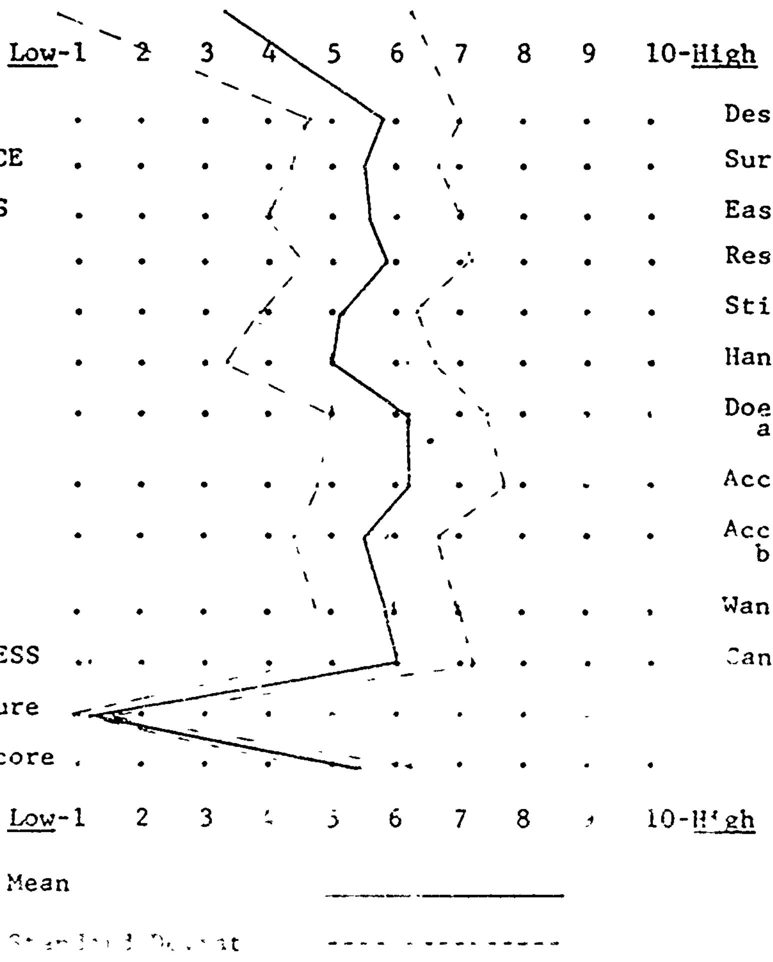

Factor
16PF
1
2
3
4
5
6
7
8
9
10
RESERVED
OUTGOING
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UNDISCIPLINED SELF CONFLICT
CONTROLLED
RELAXED
TENSE
LOW ANXIETY
HIGH ANXIETY
INTROVERSION
EXTROVERSION
ALERT POISE
INDEPENDENCE

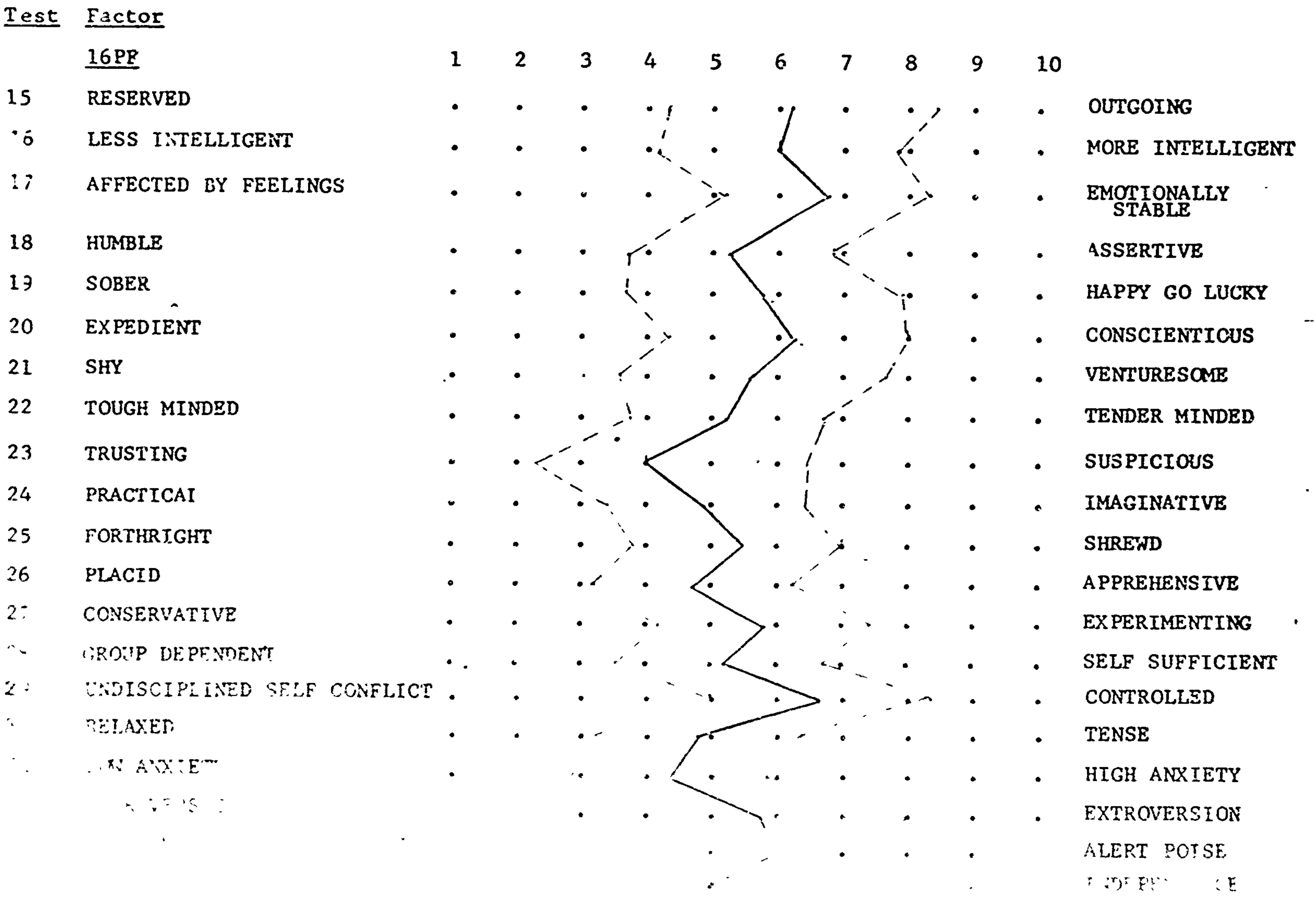


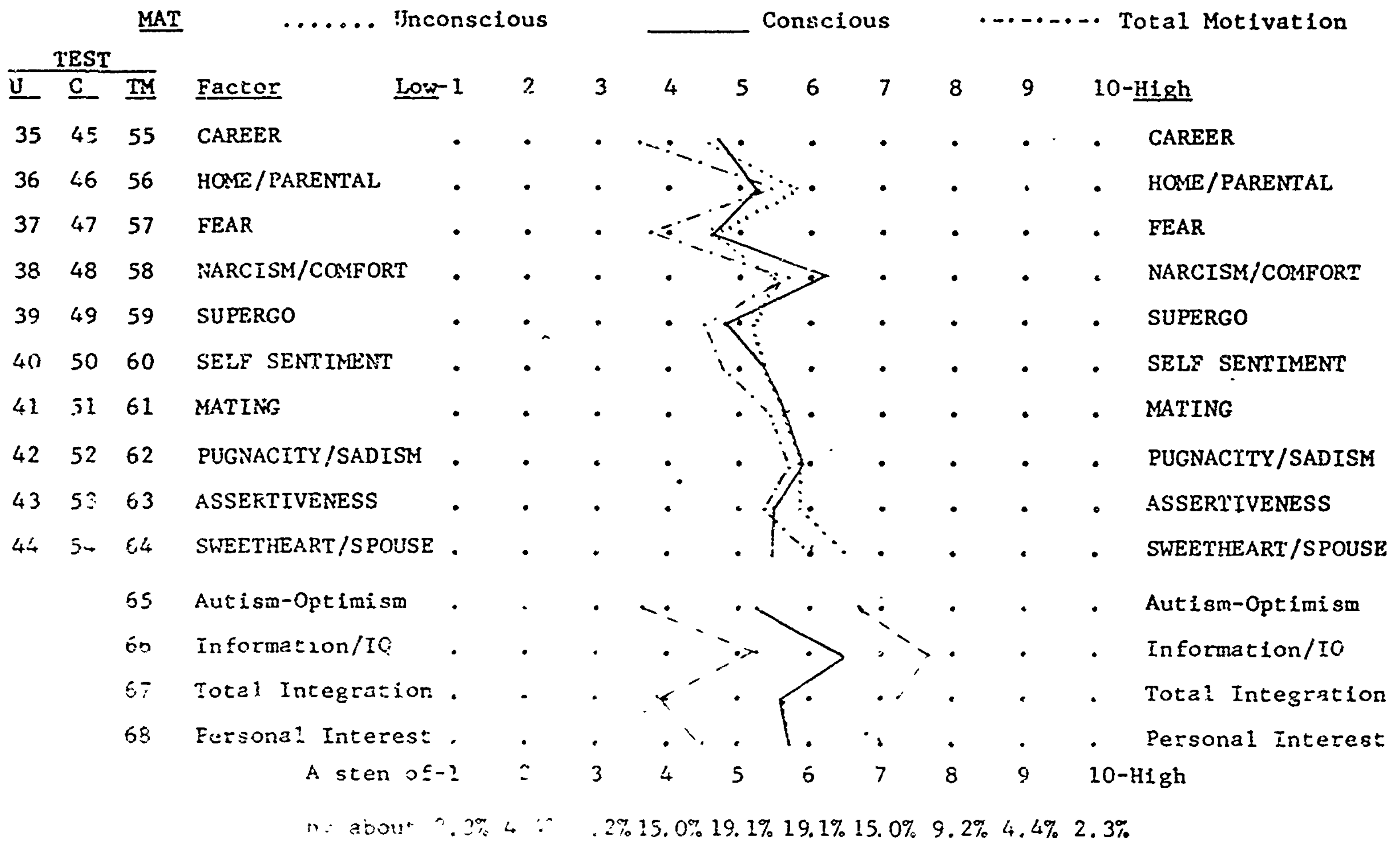
...es for the
for the "conscious"

Appx. No. L TRID 6 Profile - All Tackles

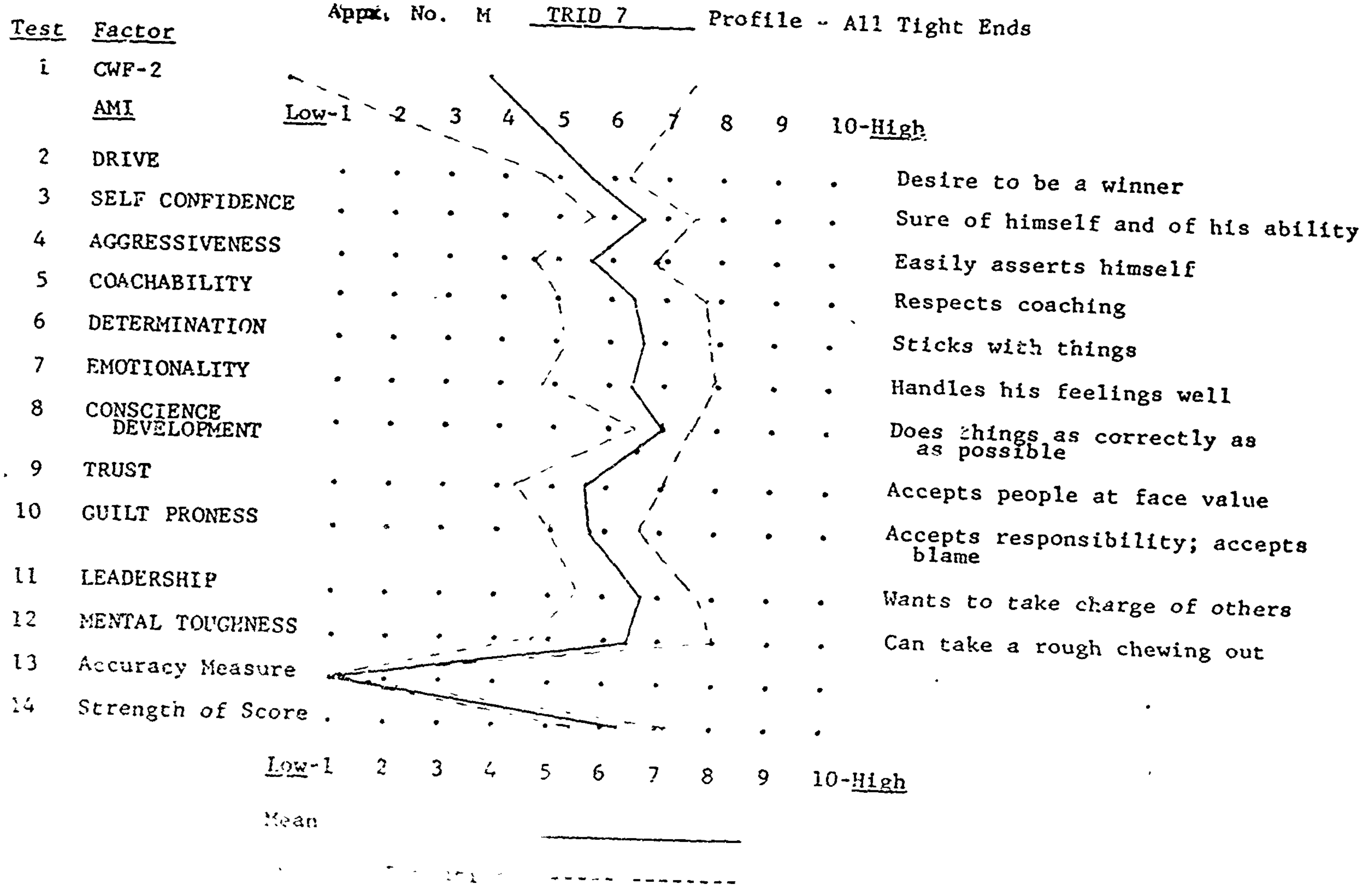
Test	Factor	
1	CWP-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13	Accuracy Measure	
14	Strength of Score	

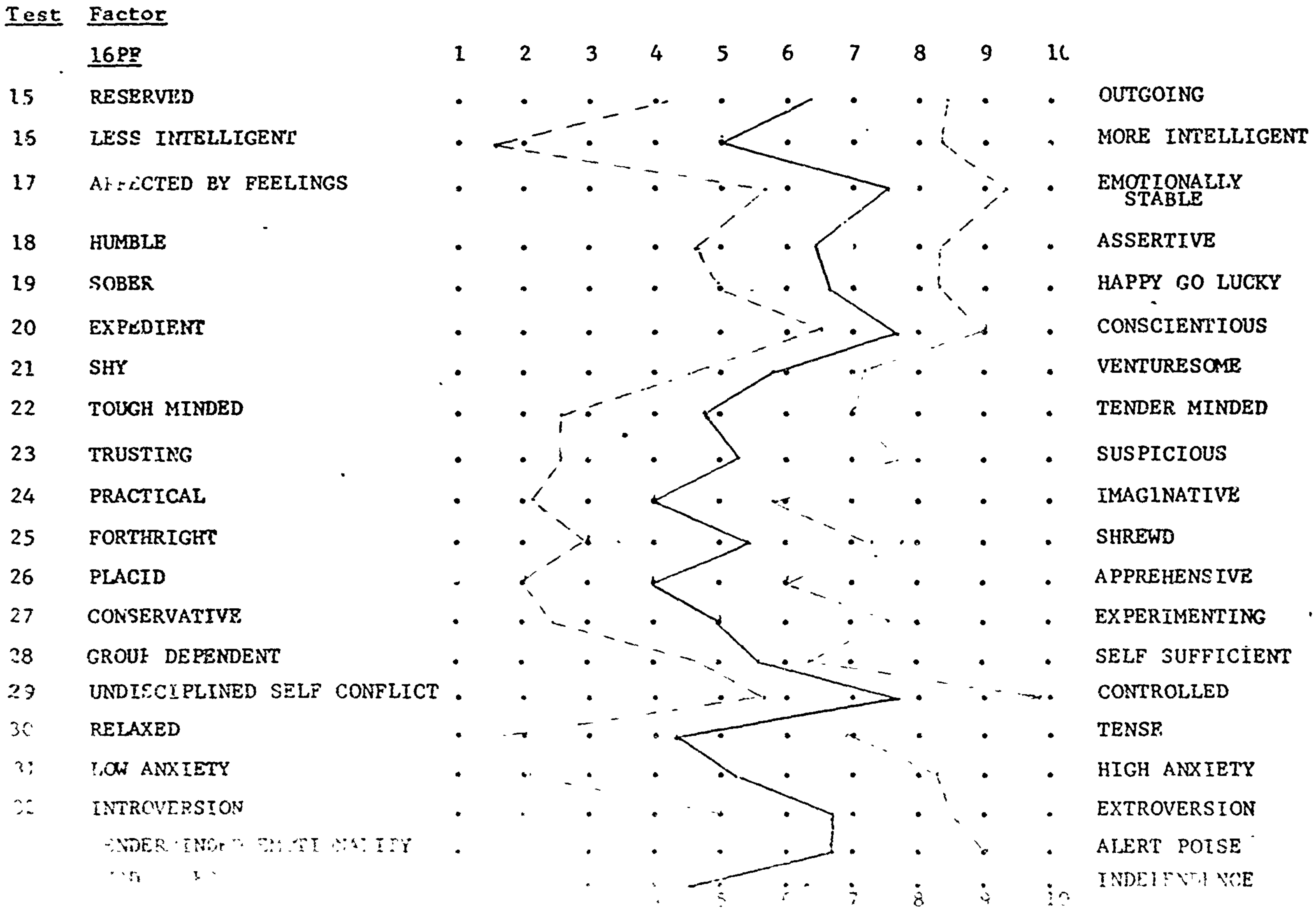


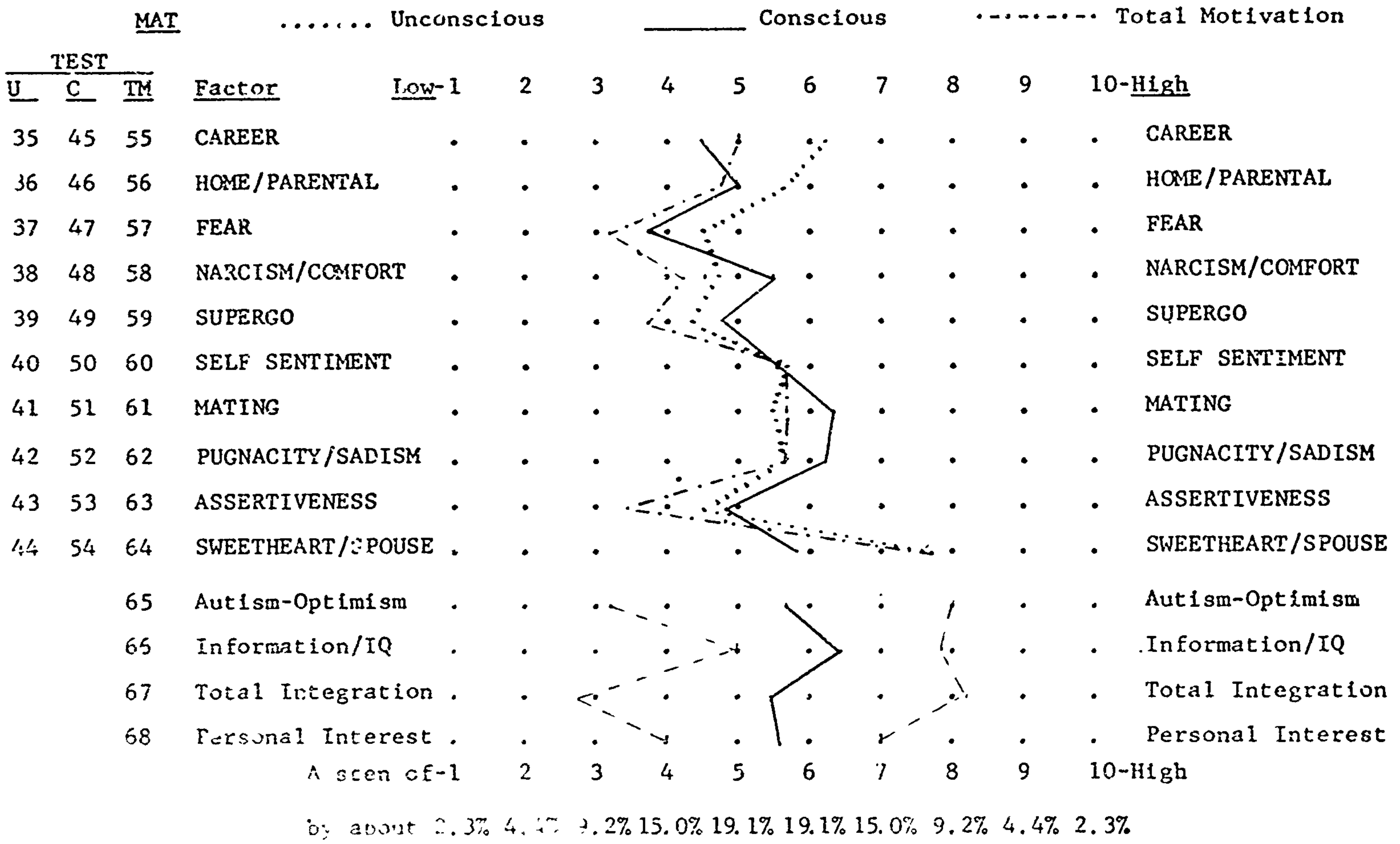

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
GROUP DEPENDENT
SELF SUFFICIENT
UNDISCIPLINED SELF CONFLICT
CONTROLLED
RELAXED
TENSE
LOW ANXIETY
HIGH ANXIETY
EXTROVERSION
ALERT POISE
INDEPENDENCE

MAT
.... Unconscious
——— Conscious
-.-.-.-.- Total Motivation
TEST
U
C
TM
Factor
Low-1
2
3
4
5
6
7
8
9
10-High
35 45 55 CAREER
36 46 56 HOME/PARENTAL
37 47 57 FEAR
38 48 58 NARCISM/COMFORT
39 49 59 SUPERGO
40 50 60 SELF SENTIMENT
41 51 61 MATING
42 52 62 PUGNACITY/SADISM
43 53 63 ASSERTIVENESS
44 54 64 SWEETHEART/SPOUSE
65 Autism-Optimism
66 Information/IQ
67 Total Integration
68 Personal Interest
CAREER
HOME/PARENTAL
FEAR
NARCISM/COMFORT
SUPERGO
SELF SENTIMENT
MATING
PUGNACITY/SADISM
ASSERTIVENESS
SWEETHEART/SPOUSE
Autism-Optimism
Information/IQ
Total Integration
Personal Interest
A sten of-1 2 3 4 5 6 7 8 9 10-High
n: about 2.3% 4.4% 9.2% 15.0% 19.1% 19.1% 15.0% 9.2% 4.4% 2.3%

Appx. No. M TRID 7 Profile - All Tight Ends

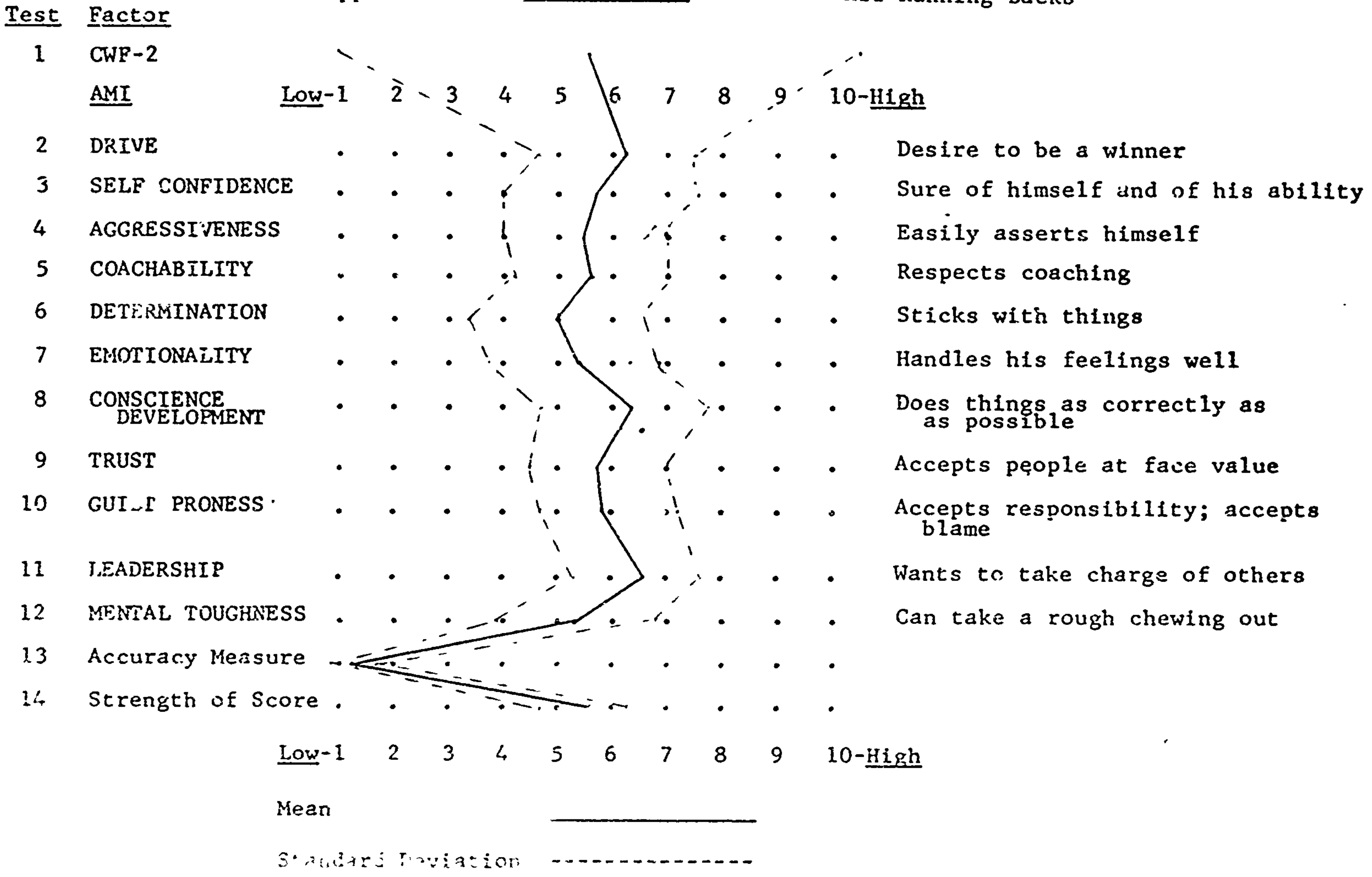


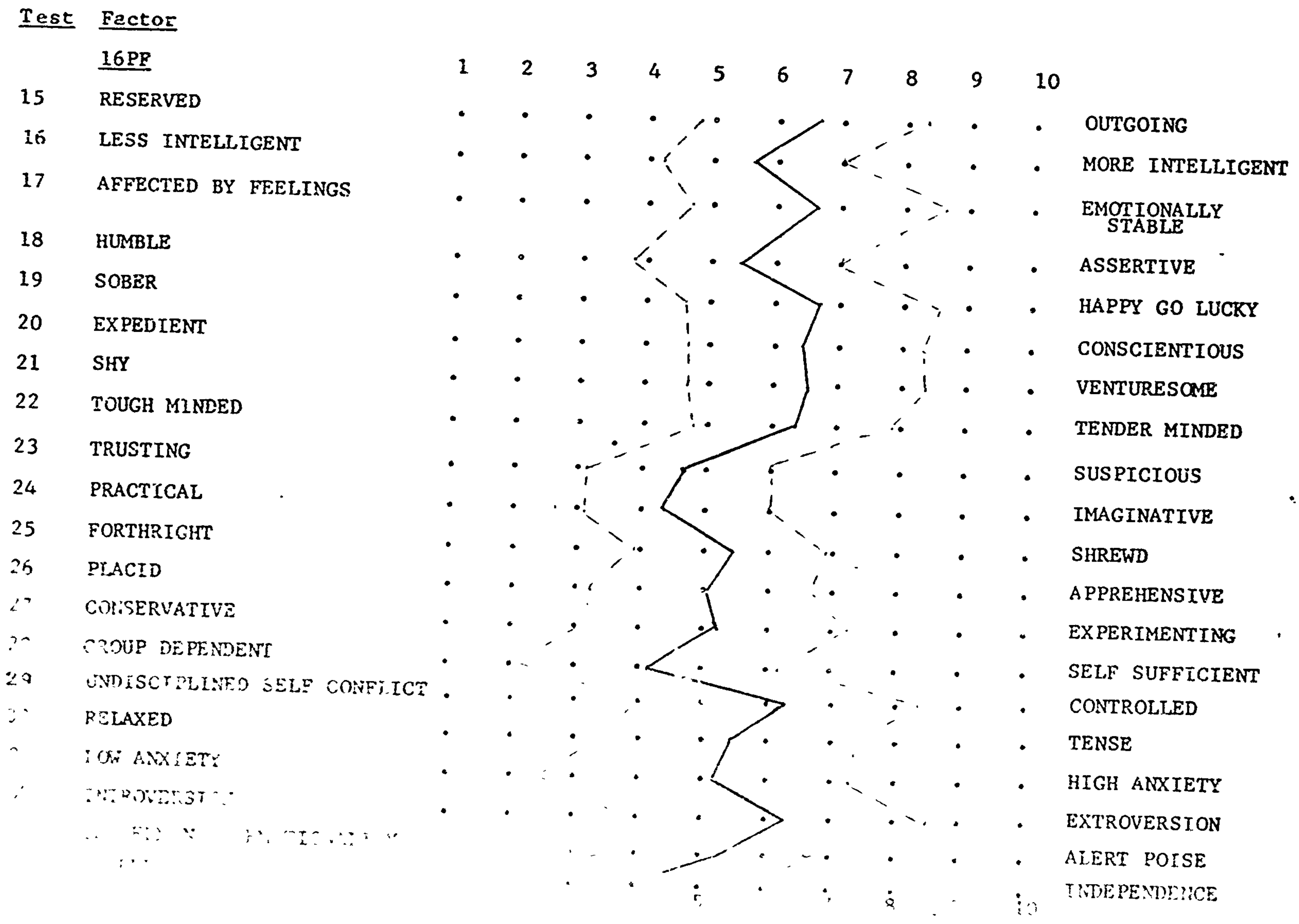

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UNDISCIPLINED SELF CONFLICT
CONTROLLED
30
RELAXED
TENSE
LOW ANXIETY
HIGH ANXIETY
INTROVERSION
EXTROVERSION
ALERT POISE
INDEPENDENCE
5
7
8
10

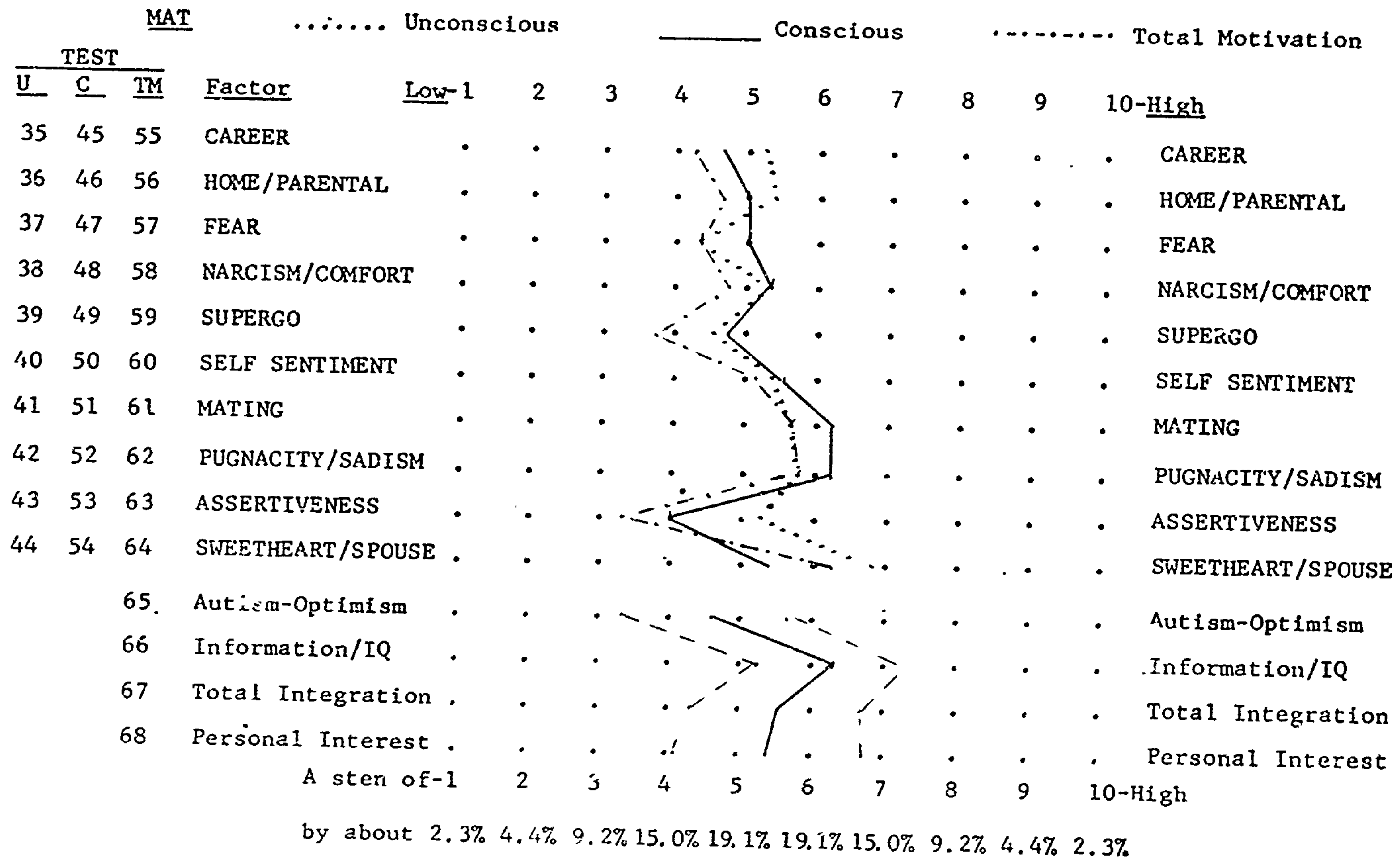


[illegible] scores with standard deviation scores for the [illegible] "unconscious" scores; in table [illegible] for the "conscious" [illegible] motivation scores."

Appx. No. N TRID 8 Profile - All Running Backs

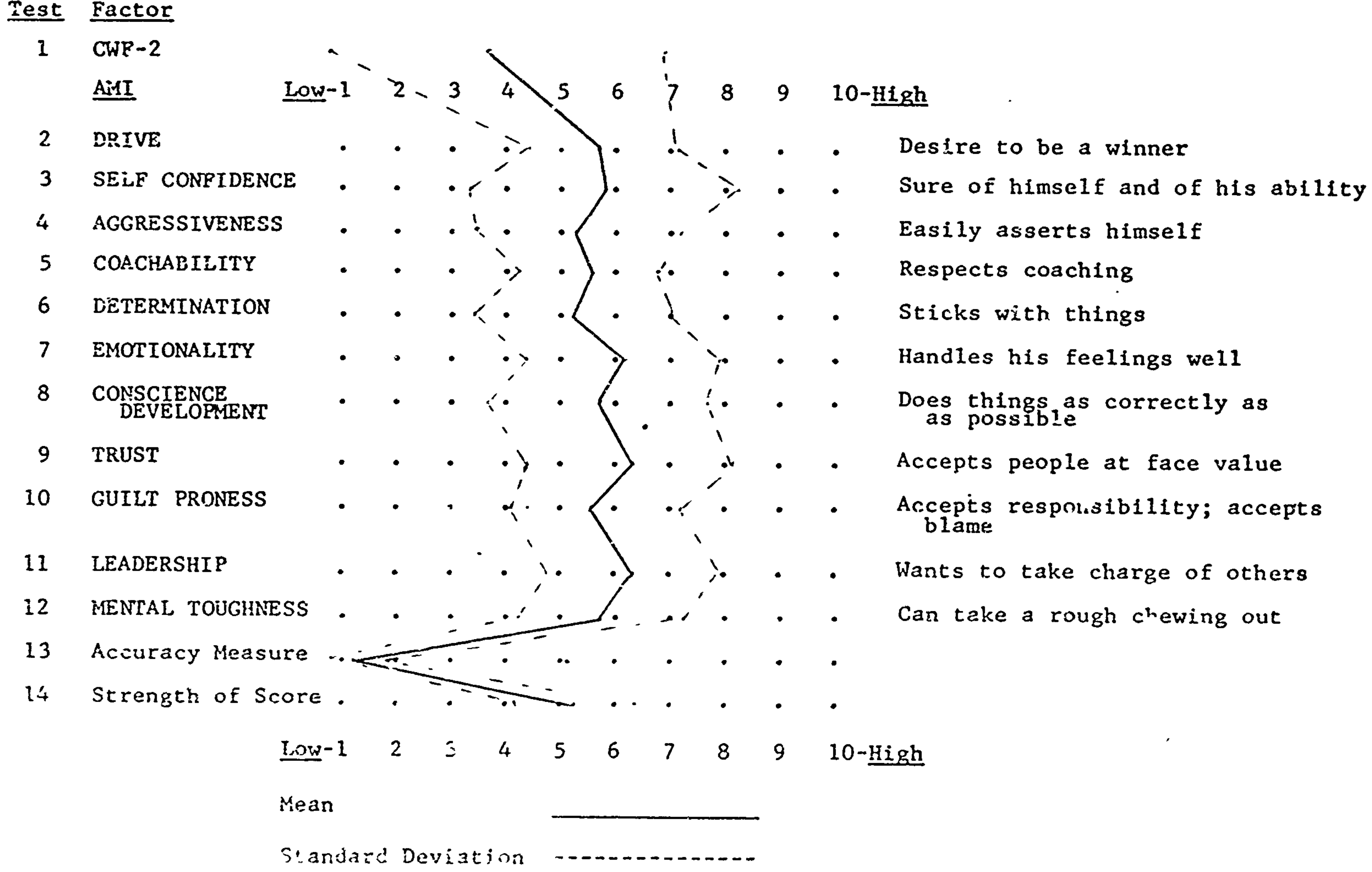


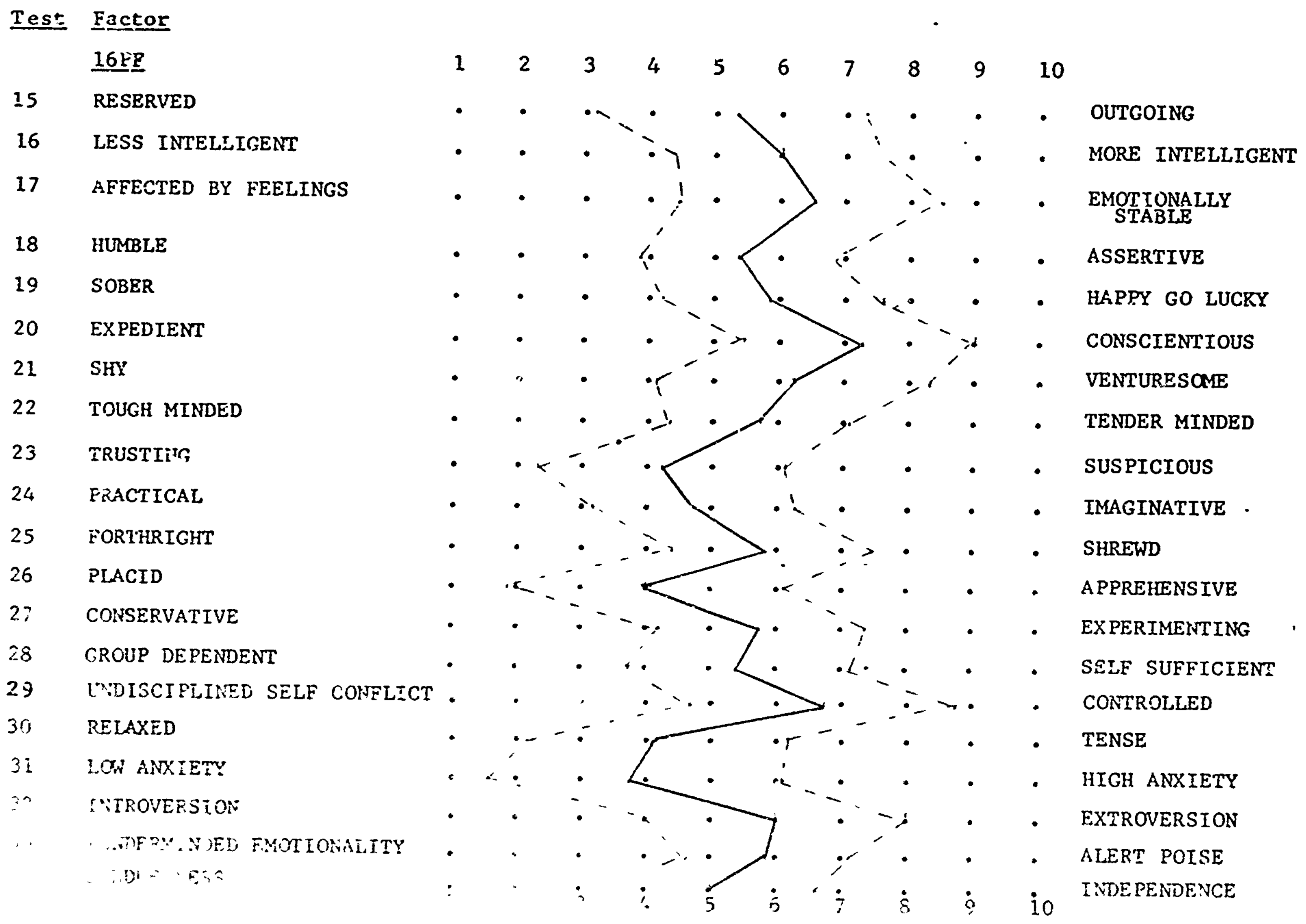

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
16 LESS INTELLIGENT
17 AFFECTED BY FEELINGS
18 HUMBLE
19 SOBER
20 EXPEDIENT
21 SHY
22 TOUGH MINDED
23 TRUSTING
24 PRACTICAL
25 FORTHRIGHT
26 PLACID
27 CONSERVATIVE
28 GROUP DEPENDENT
29 UNDISCIPLINED SELF CONFLICT
30 RELAXED
LOW ANXIETY
INTROVERSION
OUTGOING
MORE INTELLIGENT
EMOTIONALLY STABLE
ASSERTIVE
HAPPY GO LUCKY
CONSCIENTIOUS
VENTURESOME
TENDER MINDED
SUSPICIOUS
IMAGINATIVE
SHREWD
APPREHENSIVE
EXPERIMENTING
SELF SUFFICIENT
CONTROLLED
TENSE
HIGH ANXIETY
EXTROVERSION
ALERT POISE
INDEPENDENCE

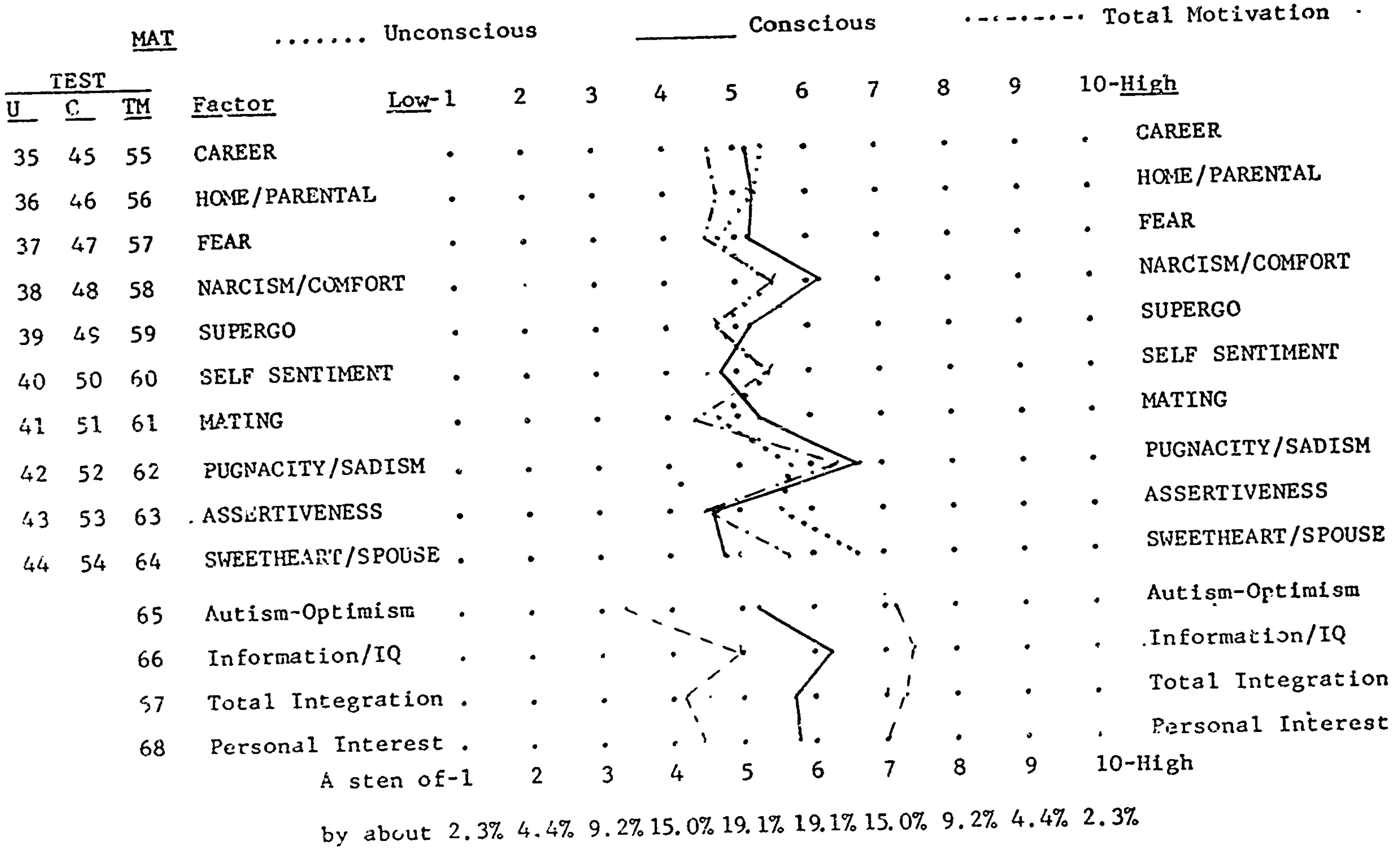


Note. The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appx. No. 0 TRID 9 Profile - All Wide Receivers

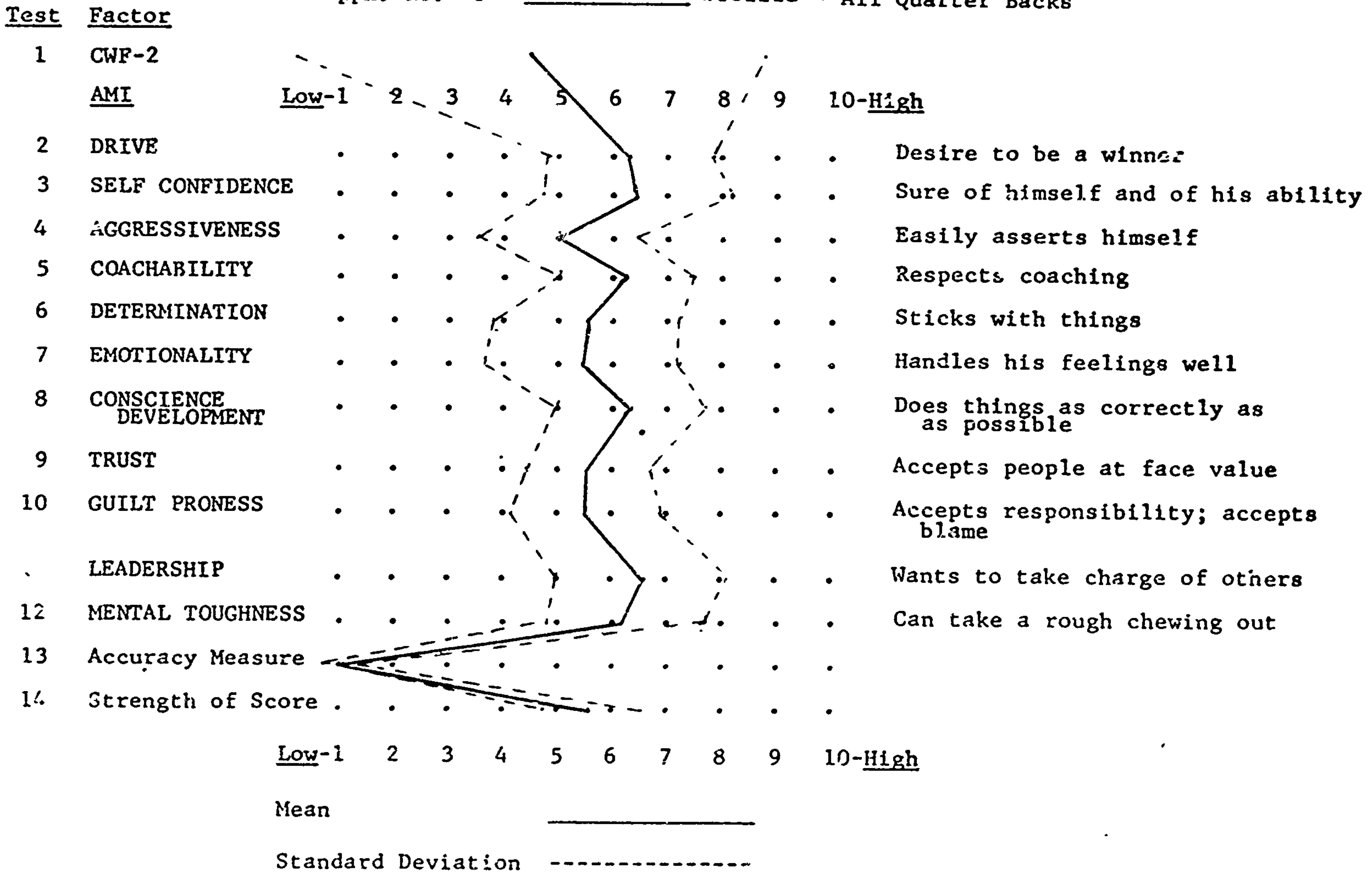


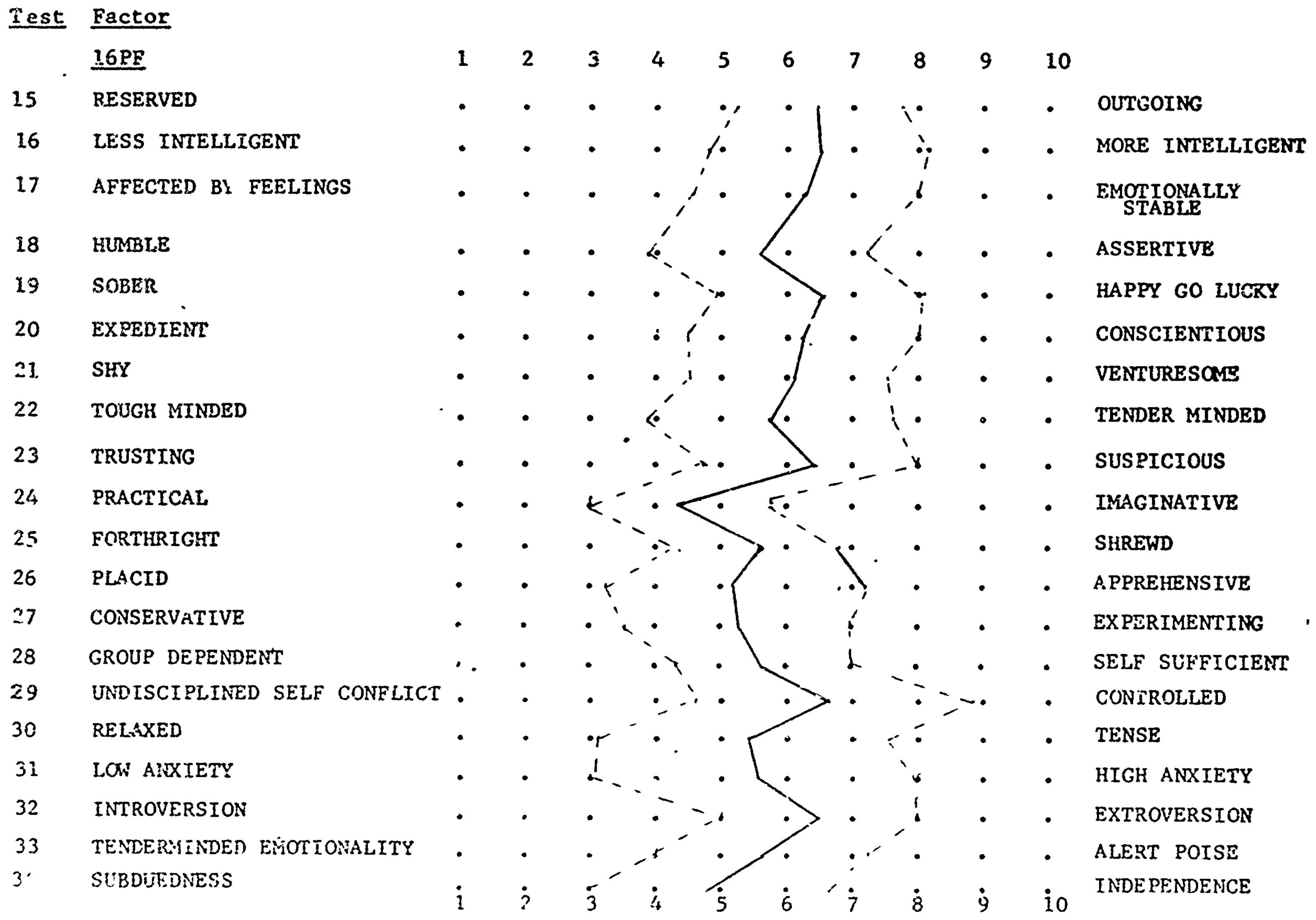

Test
Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED
16 LESS INTELLIGENT
17 AFFECTED BY FEELINGS
18 HUMBLE
19 SOBER
20 EXPEDIENT
21 SHY
22 TOUGH MINDED
23 TRUSTING
24 PRACTICAL
25 FORTHRIGHT
26 PLACID
27 CONSERVATIVE
28 GROUP DEPENDENT
29 UNDISCIPLINED SELF CONFLICT
30 RELAXED
31 LOW ANXIETY
32 INTROVERSION
TENDERMINDED EMOTIONALITY
SUBDUEDNESS
OUTGOING
MORE INTELLIGENT
EMOTIONALLY STABLE
ASSERTIVE
HAPPY GO LUCKY
CONSCIENTIOUS
VENTURESOME
TENDER MINDED
SUSPICIOUS
IMAGINATIVE
SHREWD
APPREHENSIVE
EXPERIMENTING
SELF SUFFICIENT
CONTROLLED
TENSE
HIGH ANXIETY
EXTROVERSION
ALERT POISE
INDEPENDENCE
5 6 7 8 9 10

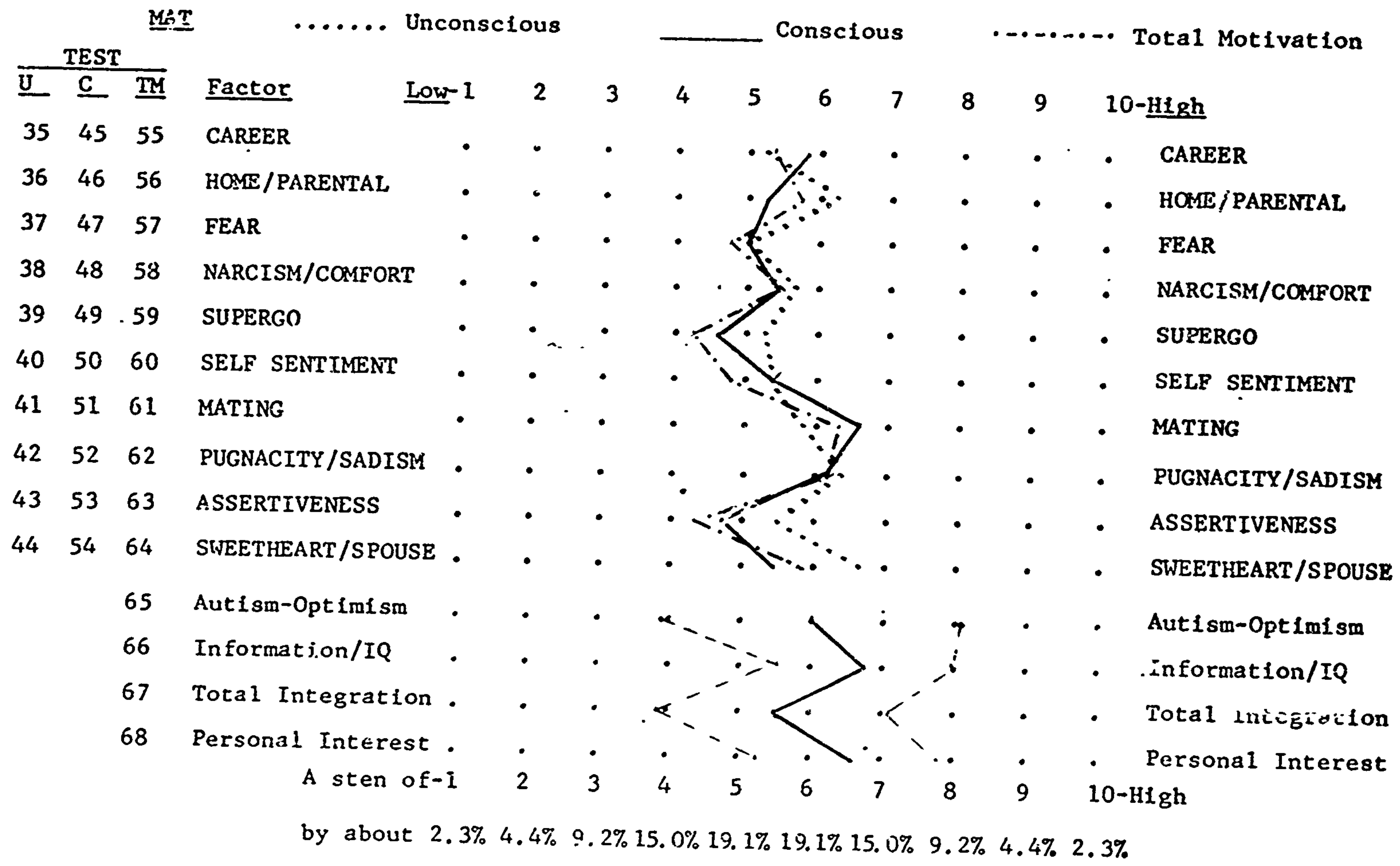


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appx. No. P TRID 10 Profile - All Quarter Backs

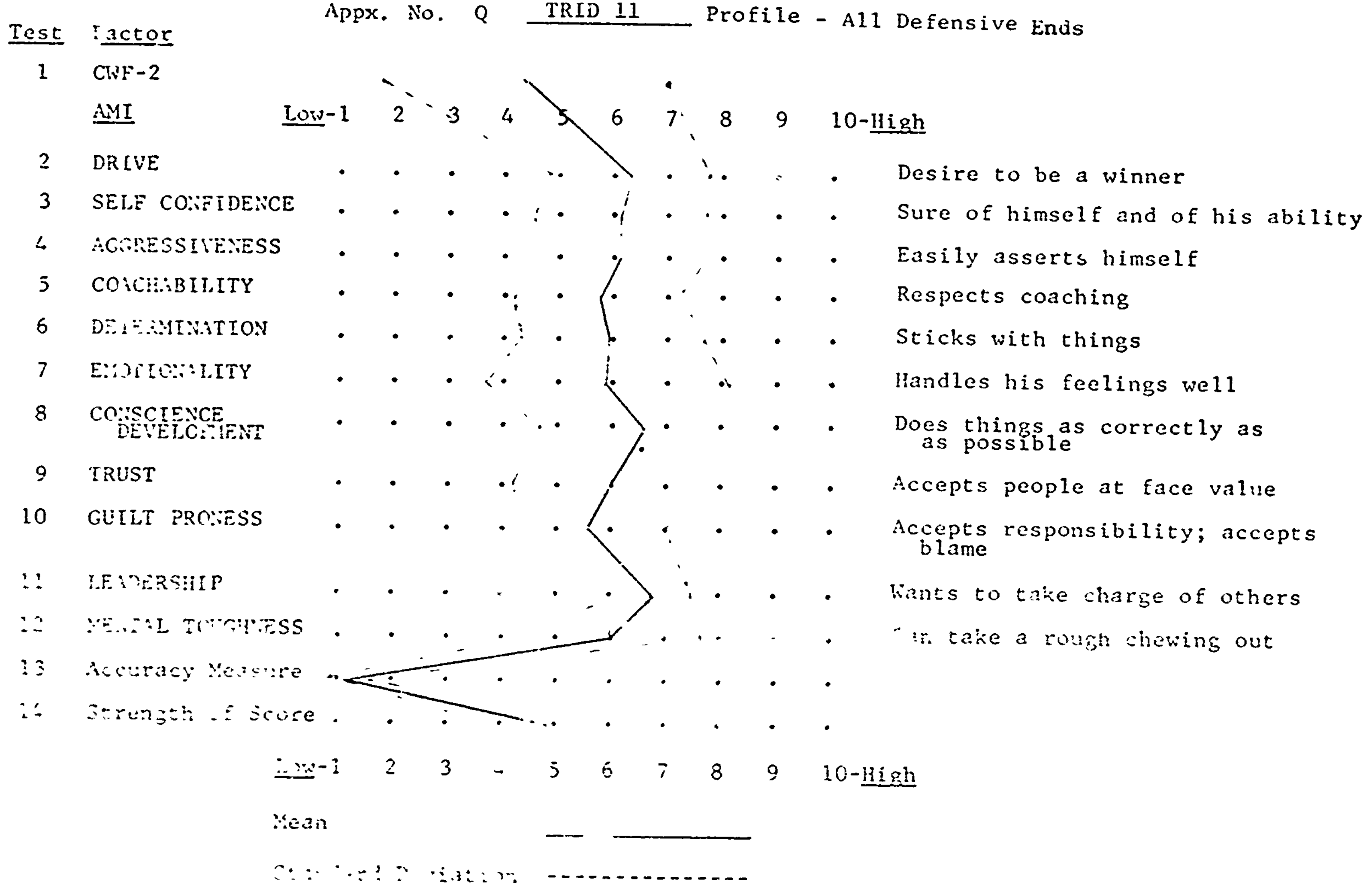


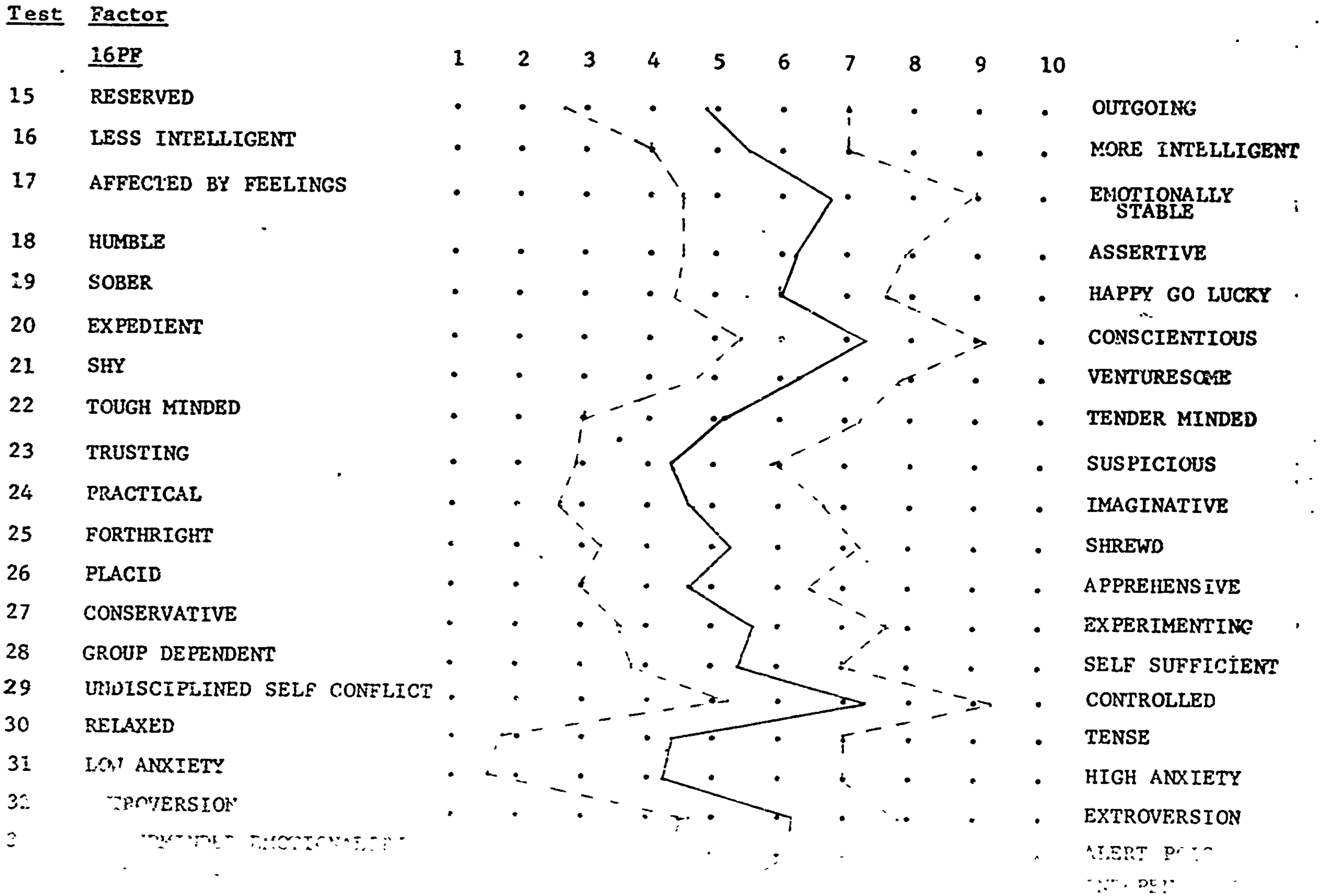

Test
Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED — OUTGOING
16 LESS INTELLIGENT — MORE INTELLIGENT
17 AFFECTED BY FEELINGS — EMOTIONALLY STABLE
18 HUMBLE — ASSERTIVE
19 SOBER — HAPPY GO LUCKY
20 EXPEDIENT — CONSCIENTIOUS
21 SHY — VENTURESOME
22 TOUGH MINDED — TENDER MINDED
23 TRUSTING — SUSPICIOUS
24 PRACTICAL — IMAGINATIVE
25 FORTHRIGHT — SHREWD
26 PLACID — APPREHENSIVE
27 CONSERVATIVE — EXPERIMENTING
28 GROUP DEPENDENT — SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT — CONTROLLED
30 RELAXED — TENSE
31 LOW ANXIETY — HIGH ANXIETY
32 INTROVERSION — EXTROVERSION
33 TENDERMINDED EMOTIONALITY — ALERT POISE
34 SUBDUEDNESS — INDEPENDENCE
1 2 3 4 5 6 7 8 9 10

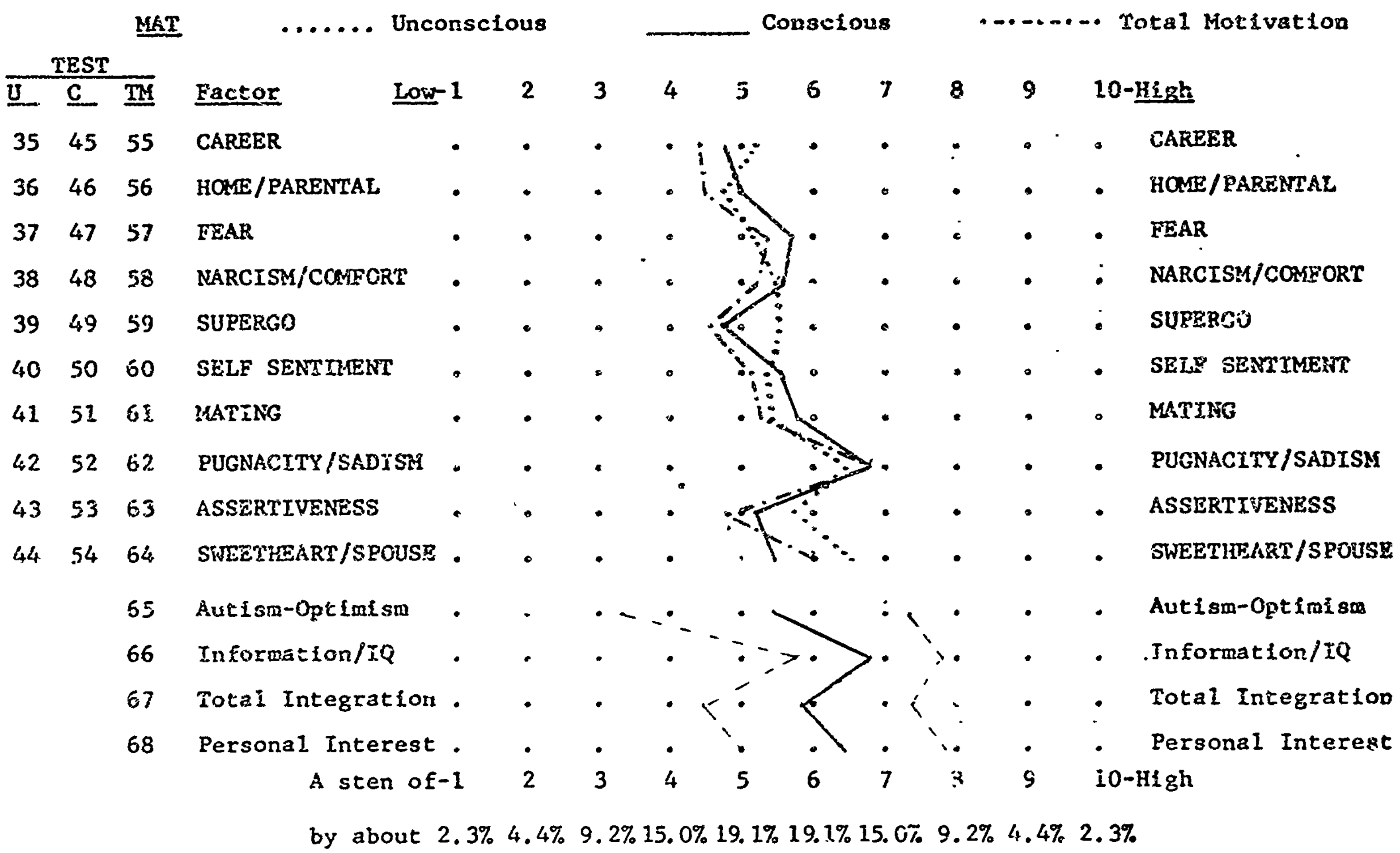


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appx. No. Q TRID 11 Profile - All Defensive Ends

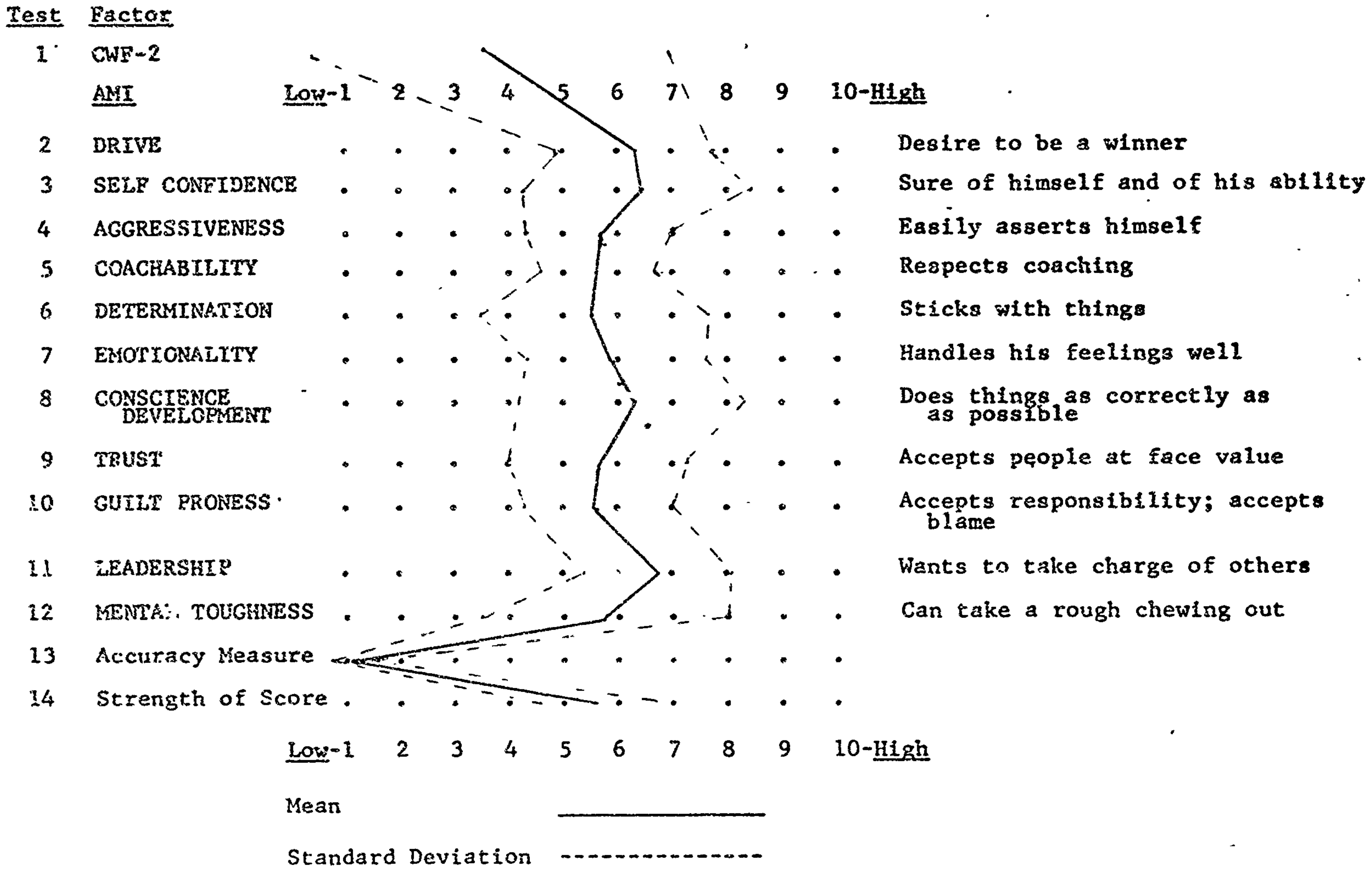


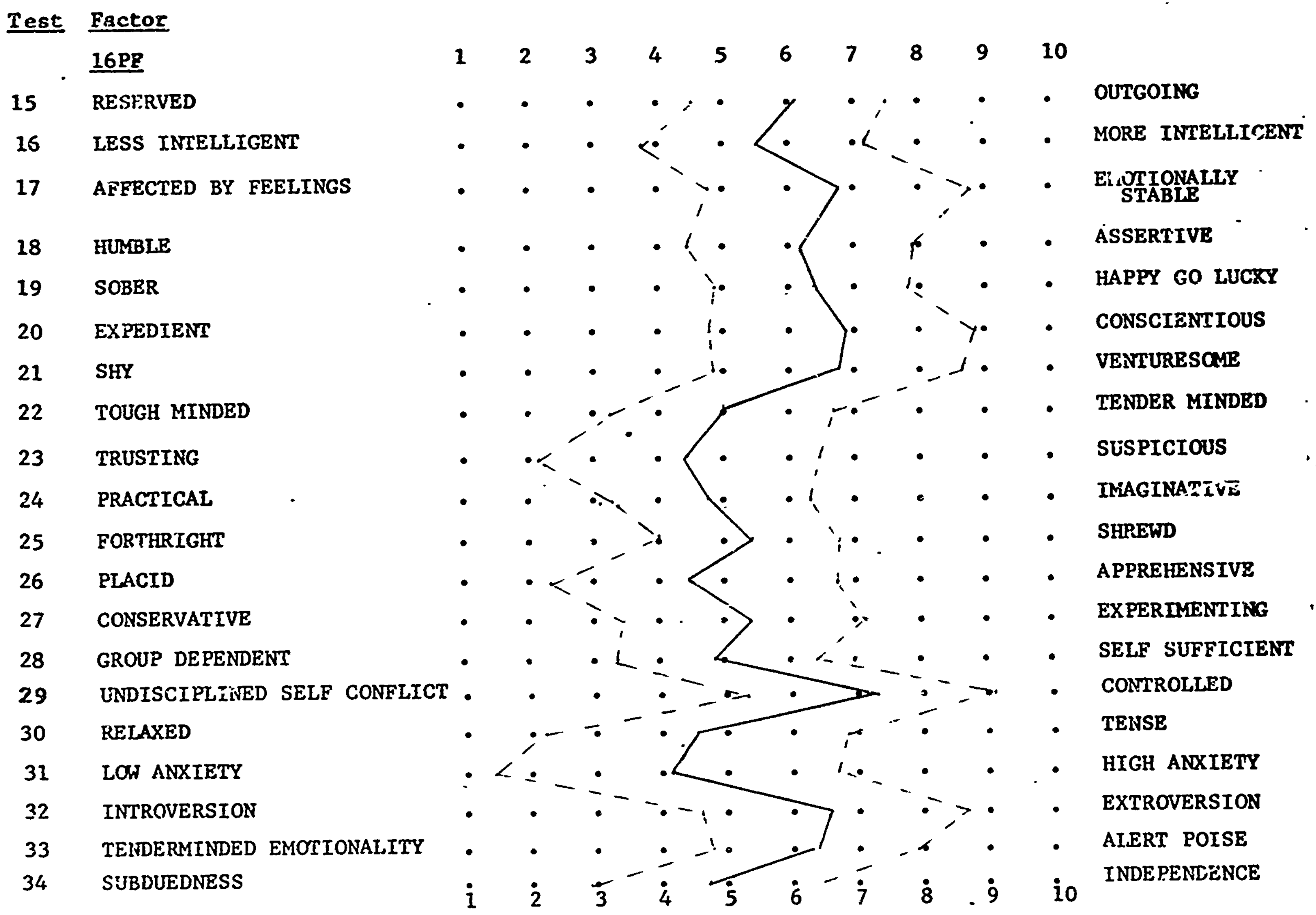

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
32 INTROVERSION
EXTROVERSION
ALERT

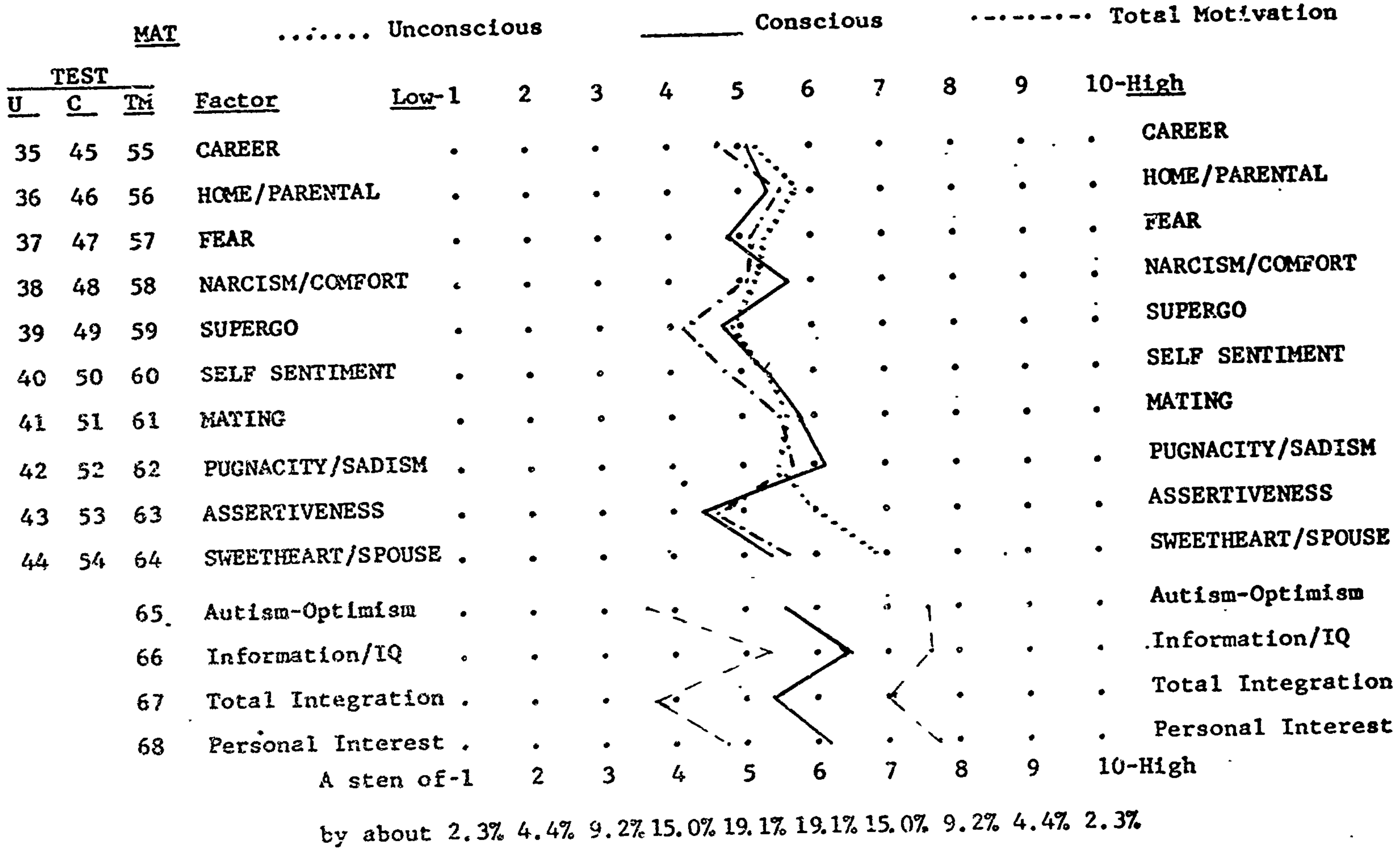


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

APPENDIX R TRID 12 Profile - All Linebackers



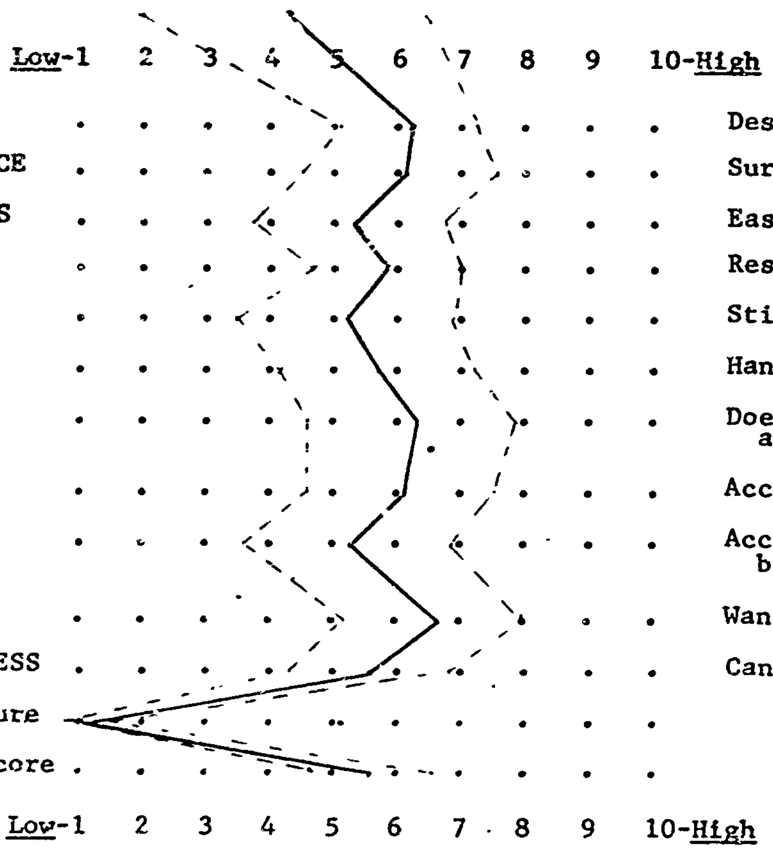

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED — OUTGOING
16 LESS INTELLIGENT — MORE INTELLIGENT
17 AFFECTED BY FEELINGS — EMOTIONALLY STABLE
18 HUMBLE — ASSERTIVE
19 SOBER — HAPPY GO LUCKY
20 EXPEDIENT — CONSCIENTIOUS
21 SHY — VENTURESOME
22 TOUGH MINDED — TENDER MINDED
23 TRUSTING — SUSPICIOUS
24 PRACTICAL — IMAGINATIVE
25 FORTHRIGHT — SHREWD
26 PLACID — APPREHENSIVE
27 CONSERVATIVE — EXPERIMENTING
28 GROUP DEPENDENT — SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT — CONTROLLED
30 RELAXED — TENSE
31 LOW ANXIETY — HIGH ANXIETY
32 INTROVERSION — EXTROVERSION
33 TENDERMINDED EMOTIONALITY — ALERT POISE
34 SUBDUEDNESS — INDEPENDENCE



Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

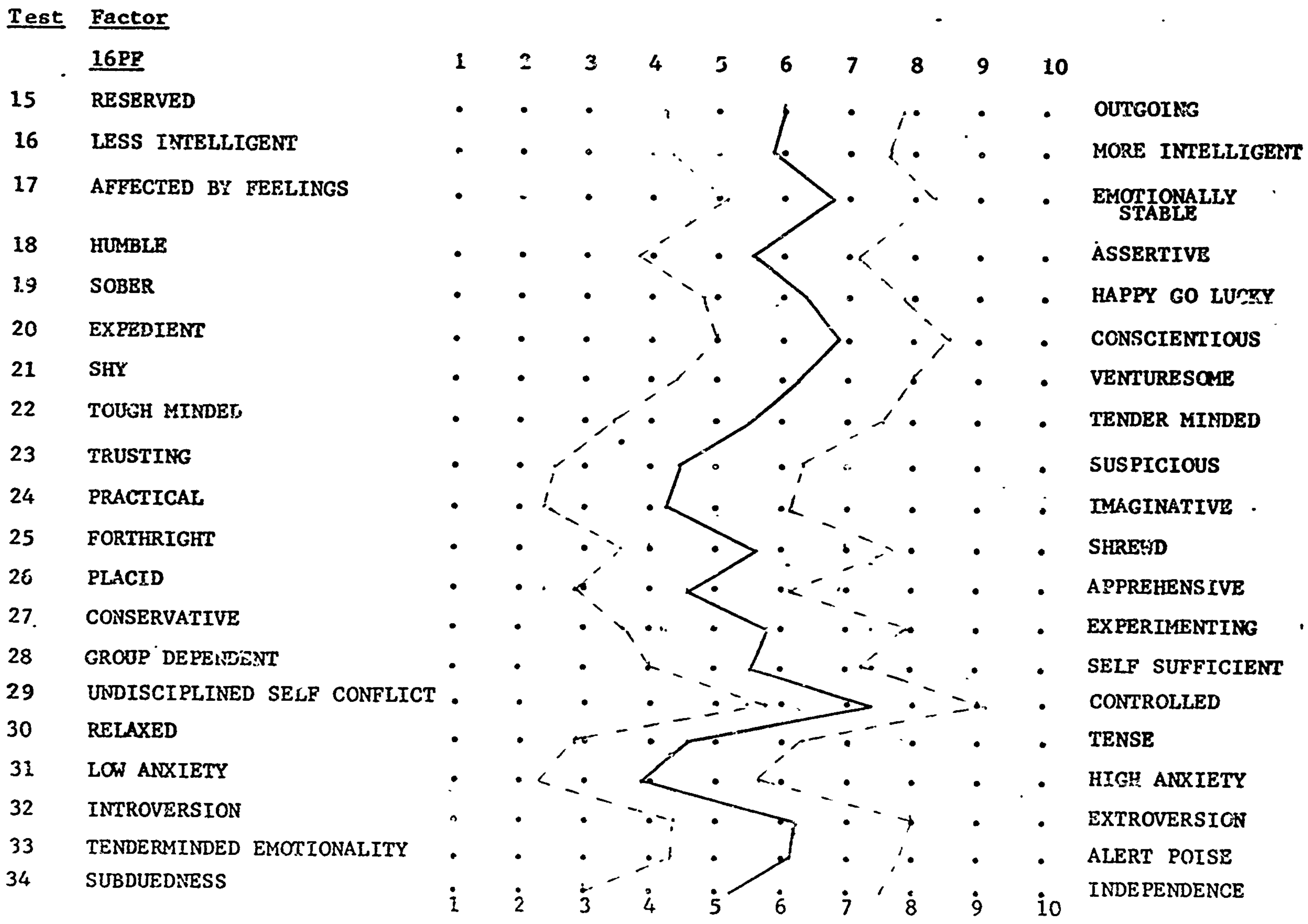
Appendix S TRID 13 Profile - All Defensive Backs

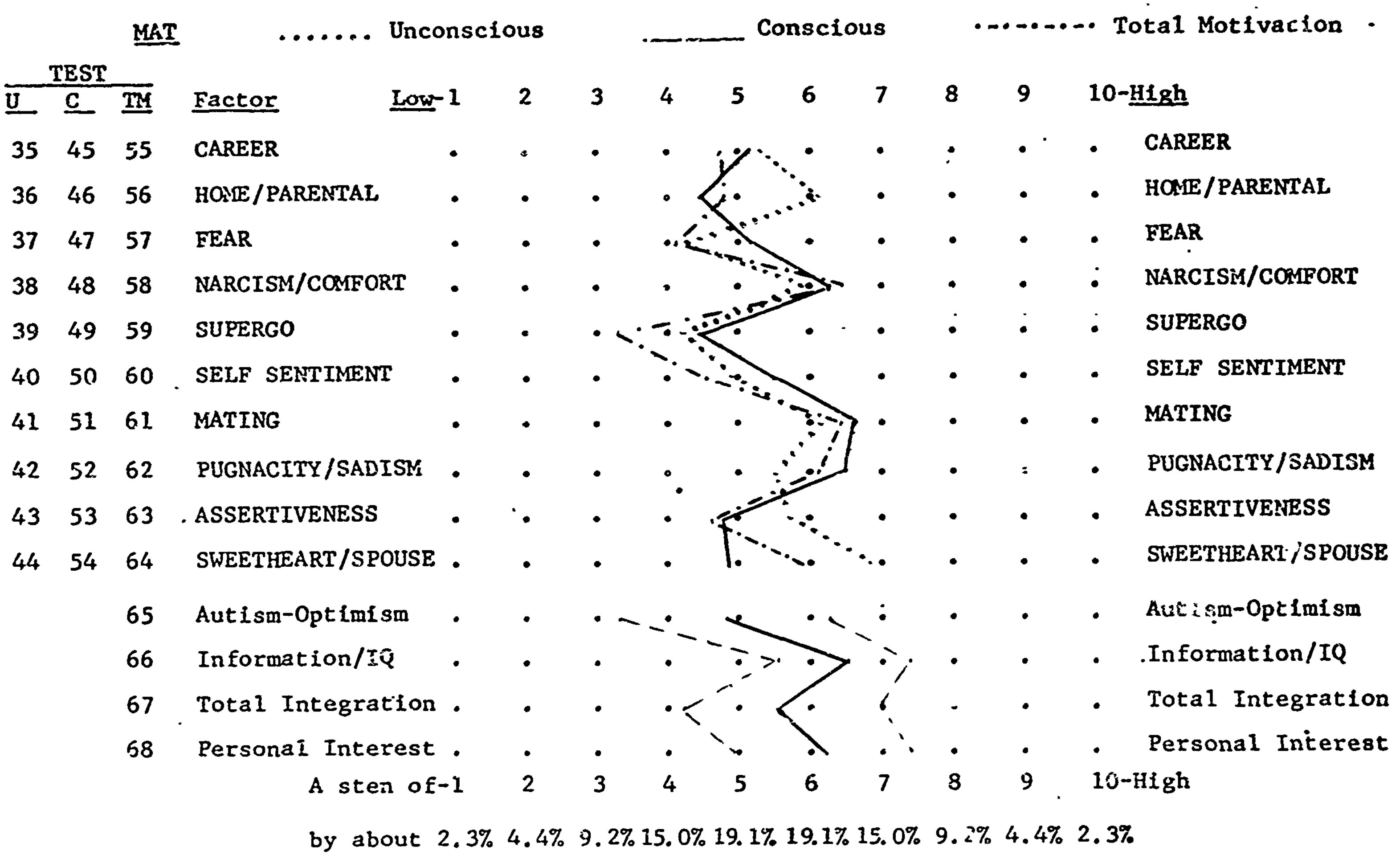
Test	Factor		
1	CWF-2		
	AMI		
2	DRIVE		Desire to be a winner
3	SELF CONFIDENCE		Sure of himself and of his ability
4	AGGRESSIVENESS		Easily asserts himself
5	COACHABILITY		Respects coaching
6	DETERMINATION		Sticks with things
7	EMOTIONALITY		Handles his feelings well
8	CONSCIENCE DEVELOPMENT		Does things as correctly as as possible
9	TRUST		Accepts people at face value
10	GUILT PRONESS		Accepts responsibility; accepts blame
11	LEADERSHIP		Wants to take charge of others
12	MENTAL TOUGHNESS		Can take a rough chewing out
13	Accuracy Measure		
14	Strength of Score		



Mean ————————

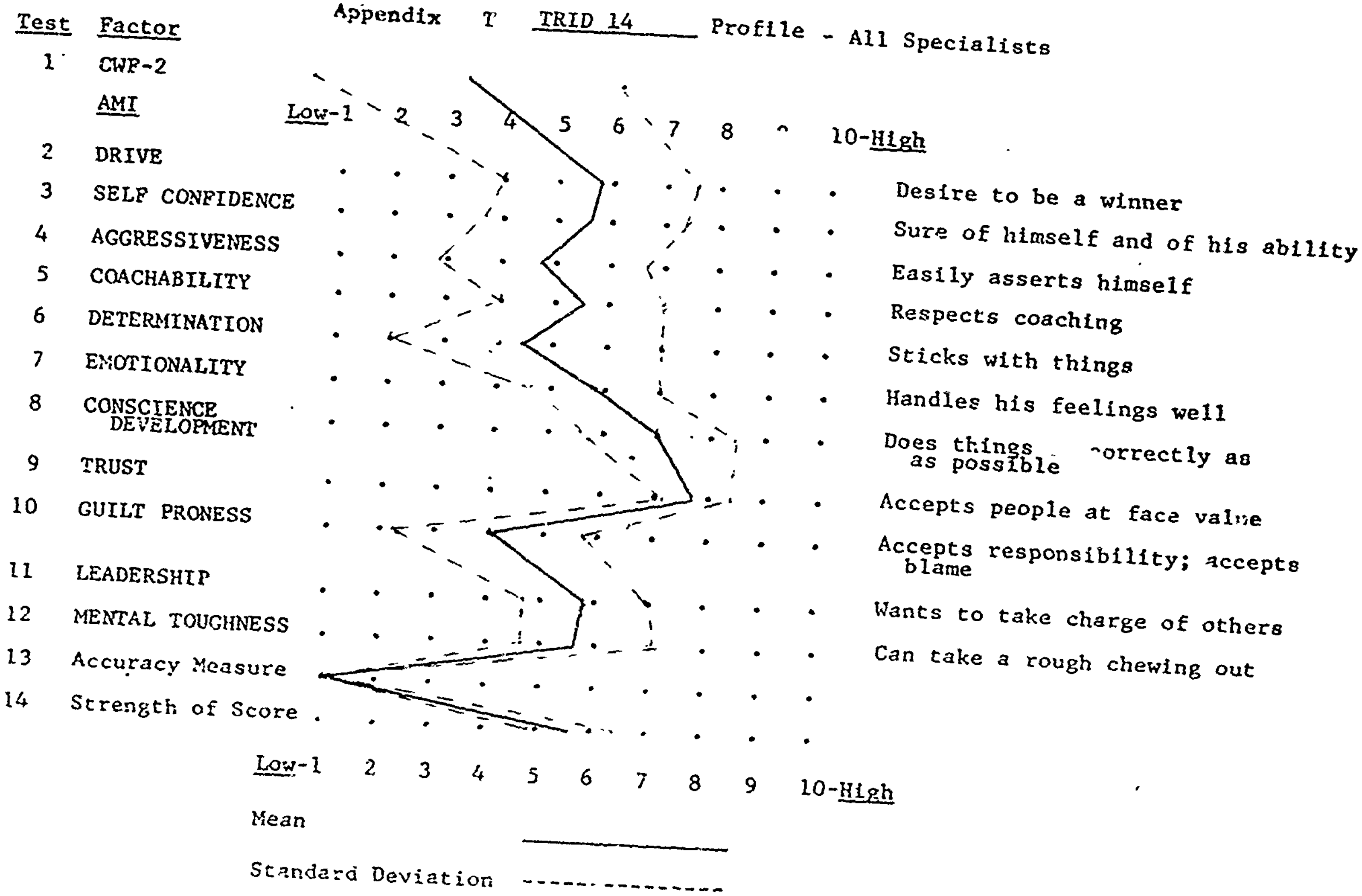
Standard Deviation ---------------

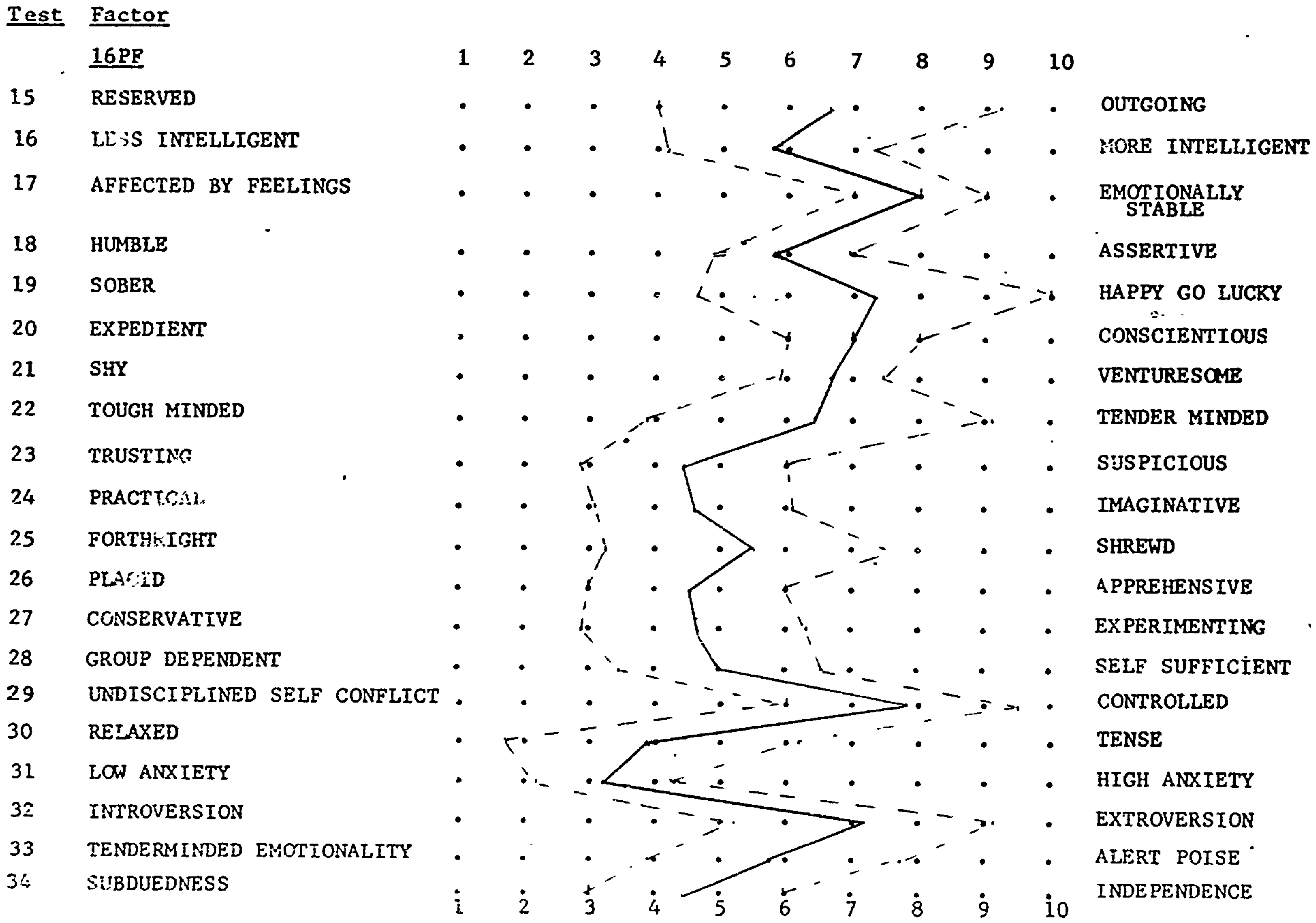

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UNDISCIPLINED SELF CONFLICT
CONTROLLED
30
RELAXED
TENSE
31
LOW ANXIETY
HIGH ANXIETY
32
INTROVERSION
EXTROVERSION
33
TENDERMINDED EMOTIONALITY
ALERT POISE
34
SUBDUEDNESS
INDEPENDENCE
1
2
3
4
5
6
7
8
9
10

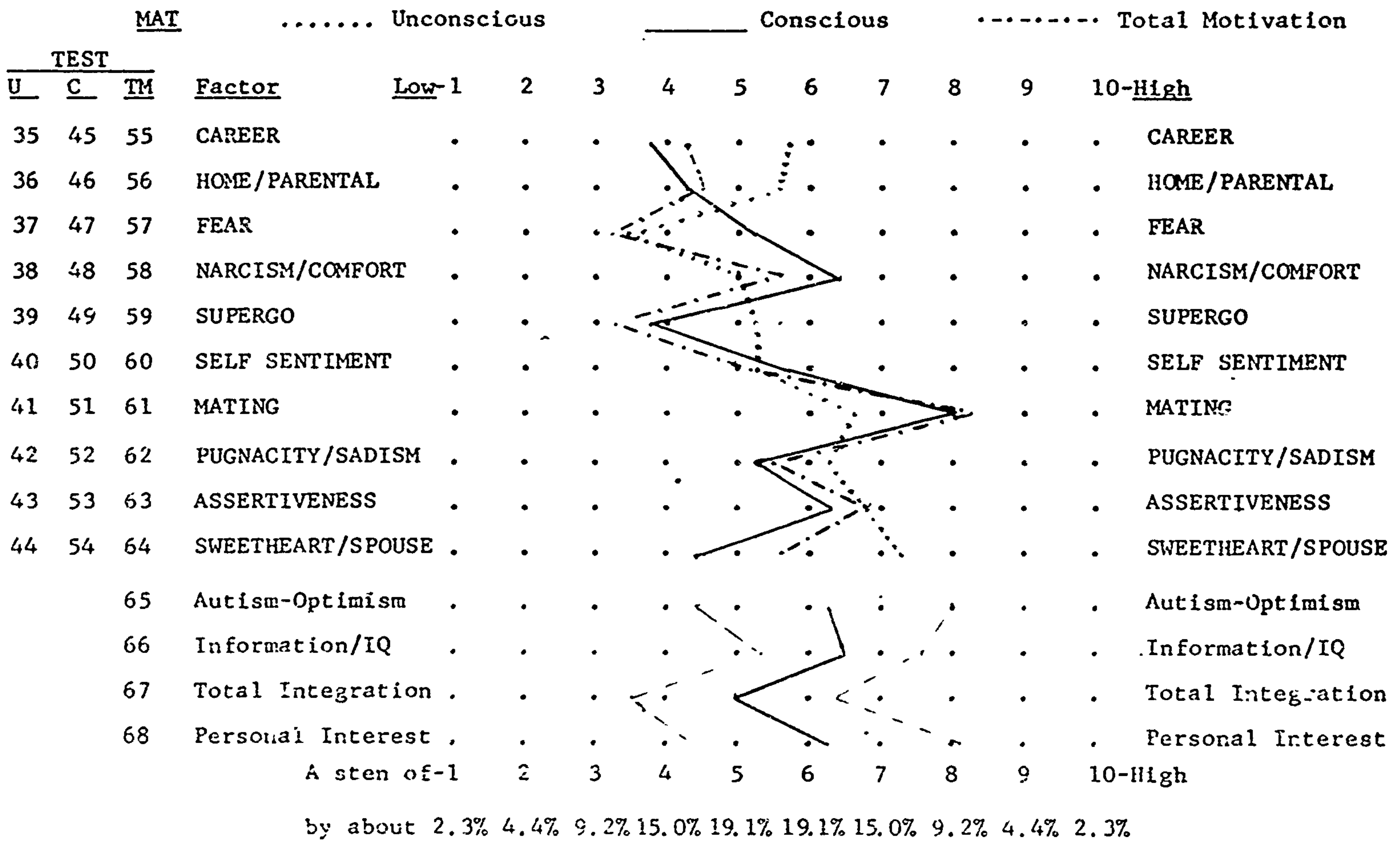


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appendix T TRID 14 Profile - All Specialists

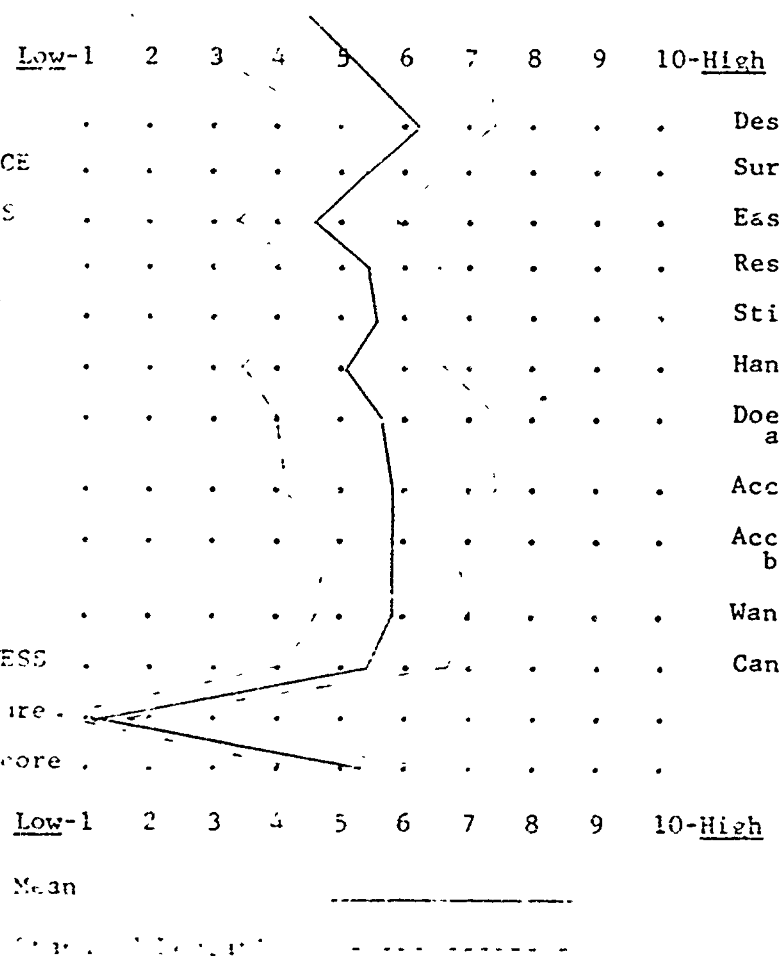


Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
16 LESS INTELLIGENT
17 AFFECTED BY FEELINGS
18 HUMBLE
19 SOBER
20 EXPEDIENT
21 SHY
22 TOUGH MINDED
23 TRUSTING
24 PRACTICAL
25 FORTHRIGHT
26 PLACID
27 CONSERVATIVE
28 GROUP DEPENDENT
29 UNDISCIPLINED SELF CONFLICT
30 RELAXED
31 LOW ANXIETY
32 INTROVERSION
33 TENDERMINDED EMOTIONALITY
34 SUBDUEDNESS
OUTGOING
MORE INTELLIGENT
EMOTIONALLY STABLE
ASSERTIVE
HAPPY GO LUCKY
CONSCIENTIOUS
VENTURESOME
TENDER MINDED
SUSPICIOUS
IMAGINATIVE
SHREWD
APPREHENSIVE
EXPERIMENTING
SELF SUFFICIENT
CONTROLLED
TENSE
HIGH ANXIETY
EXTROVERSION
ALERT POISE
INDEPENDENCE

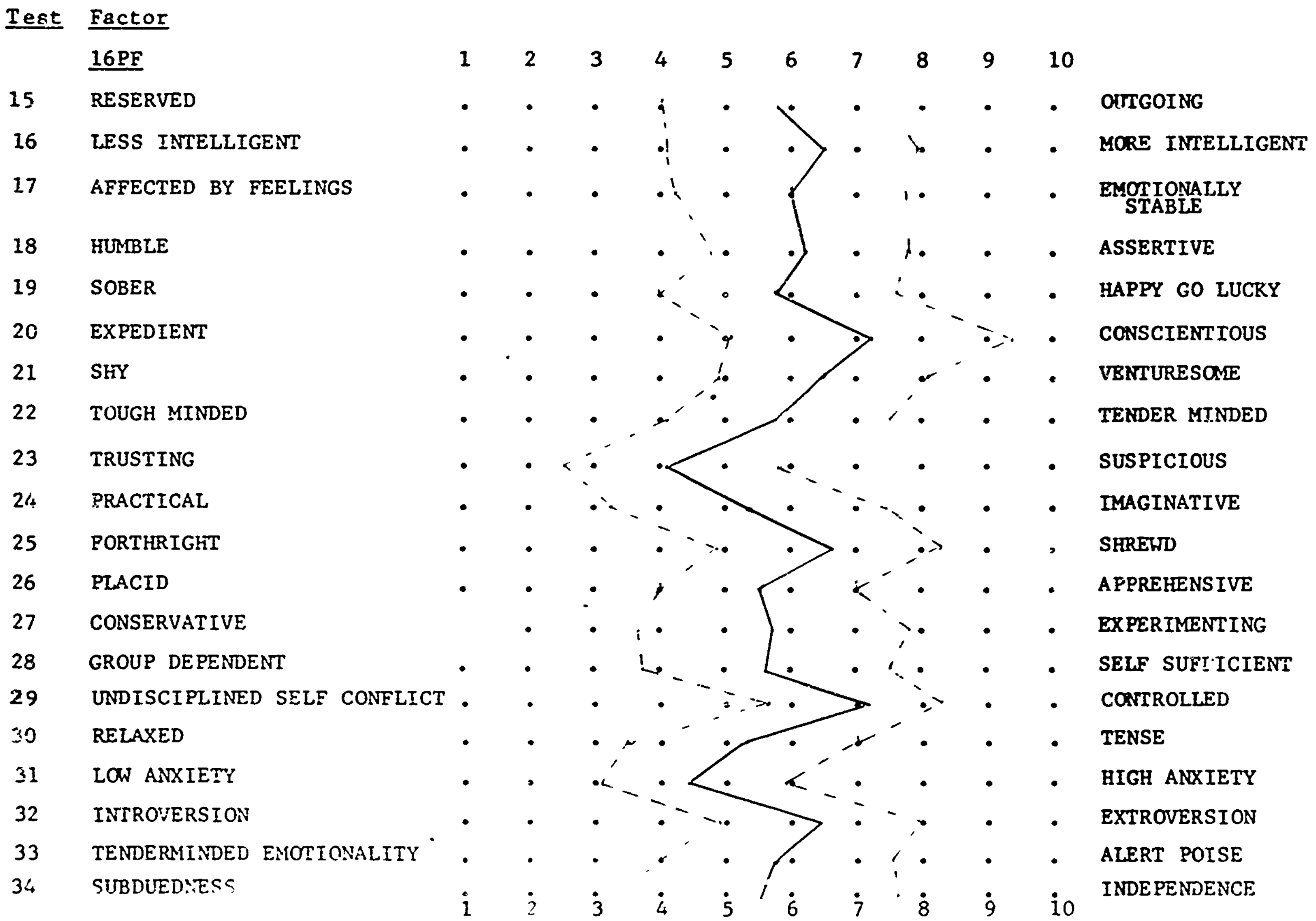


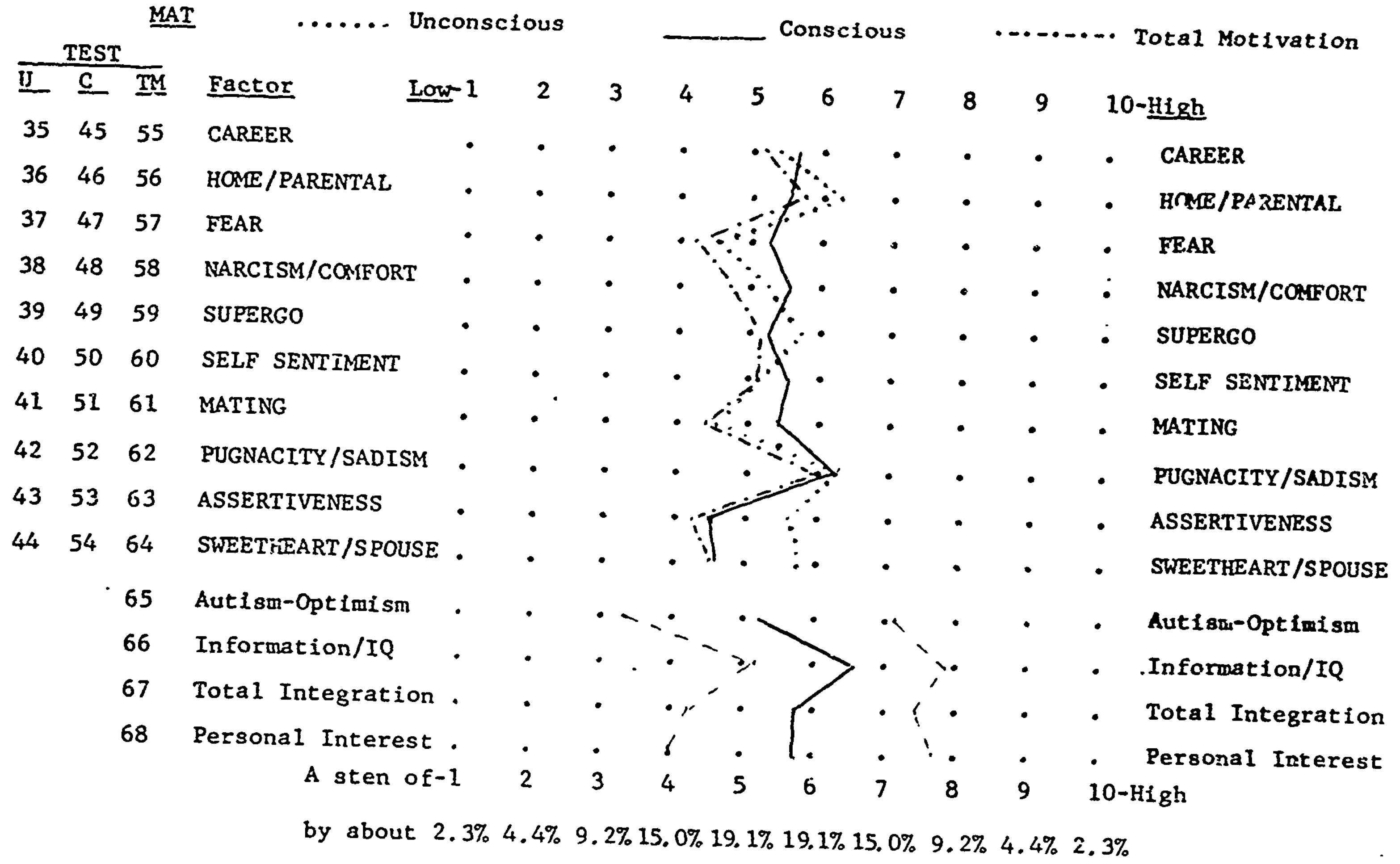
Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores, and in table for the "total motivation scores."

Appendix [illegible] IRID 15 Profile - All Managers



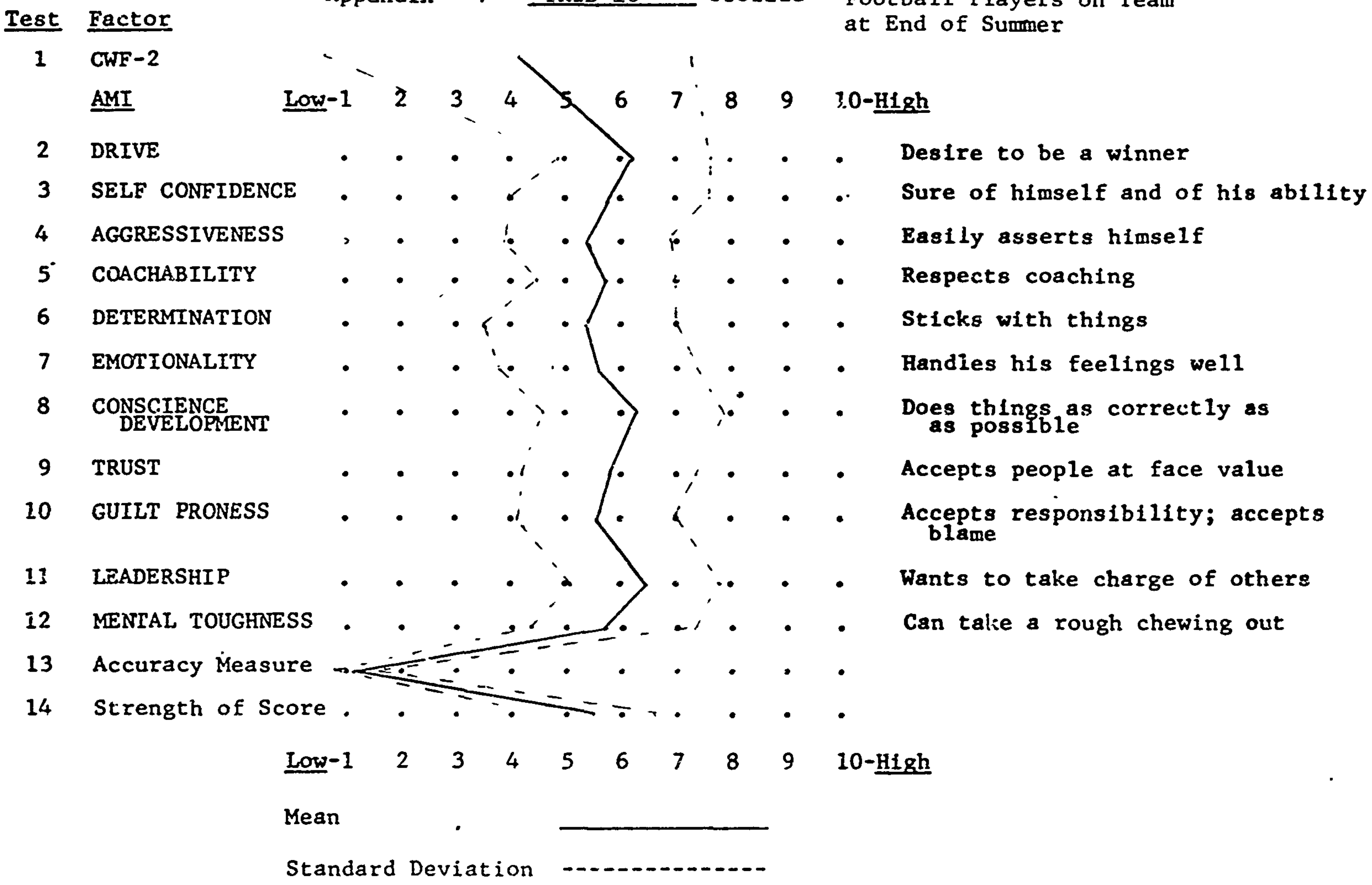
Test	Factor	Description
1	CWF-2	
	AVI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13	Accuracy Measure	
14	Strength of Score	

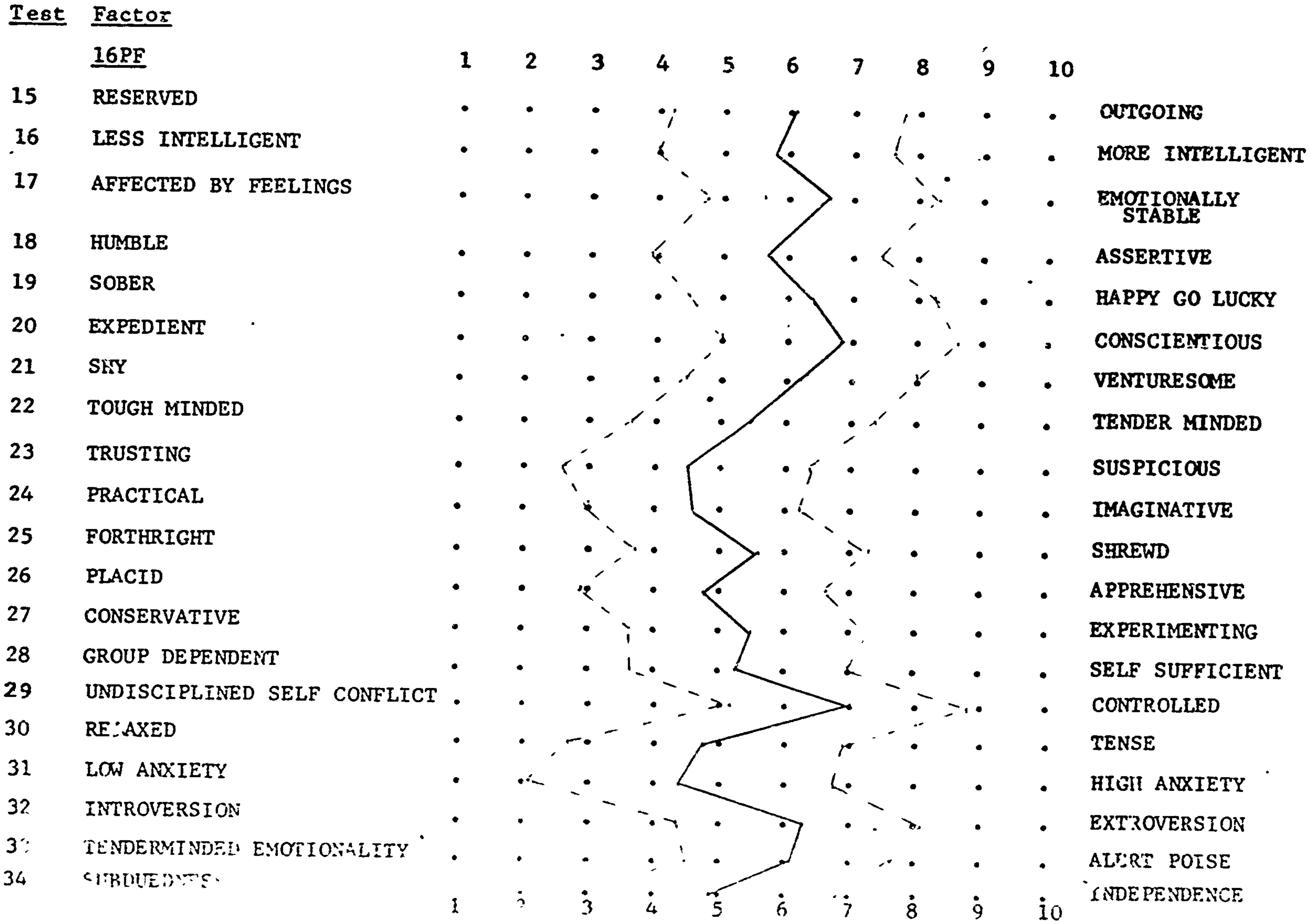

Test
Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED — OUTGOING
16 LESS INTELLIGENT — MORE INTELLIGENT
17 AFFECTED BY FEELINGS — EMOTIONALLY STABLE
18 HUMBLE — ASSERTIVE
19 SOBER — HAPPY GO LUCKY
20 EXPEDIENT — CONSCIENTIOUS
21 SHY — VENTURESOME
22 TOUGH MINDED — TENDER MINDED
23 TRUSTING — SUSPICIOUS
24 PRACTICAL — IMAGINATIVE
25 PORTHRIGHT — SHREWD
26 PLACID — APPREHENSIVE
27 CONSERVATIVE — EXPERIMENTING
28 GROUP DEPENDENT — SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT — CONTROLLED
30 RELAXED — TENSE
31 LOW ANXIETY — HIGH ANXIETY
32 INTROVERSION — EXTROVERSION
33 TENDERMINDED EMOTIONALITY — ALERT POISE
34 SUBDUEDNESS — INDEPENDENCE
1 2 3 4 5 6 7 8 9 10

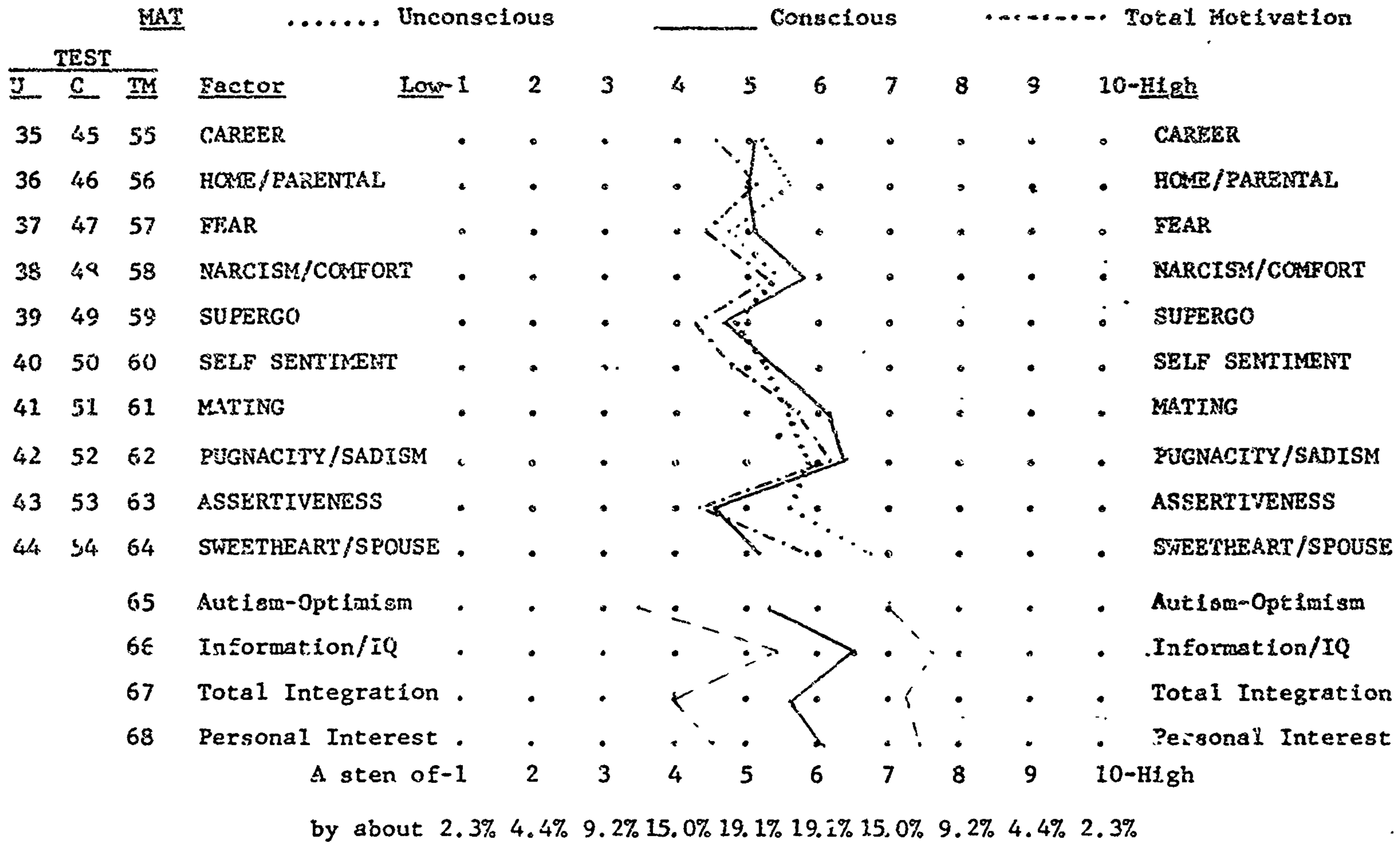


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appendix V TRID 16 Profile - Football Players on Team at End of Summer

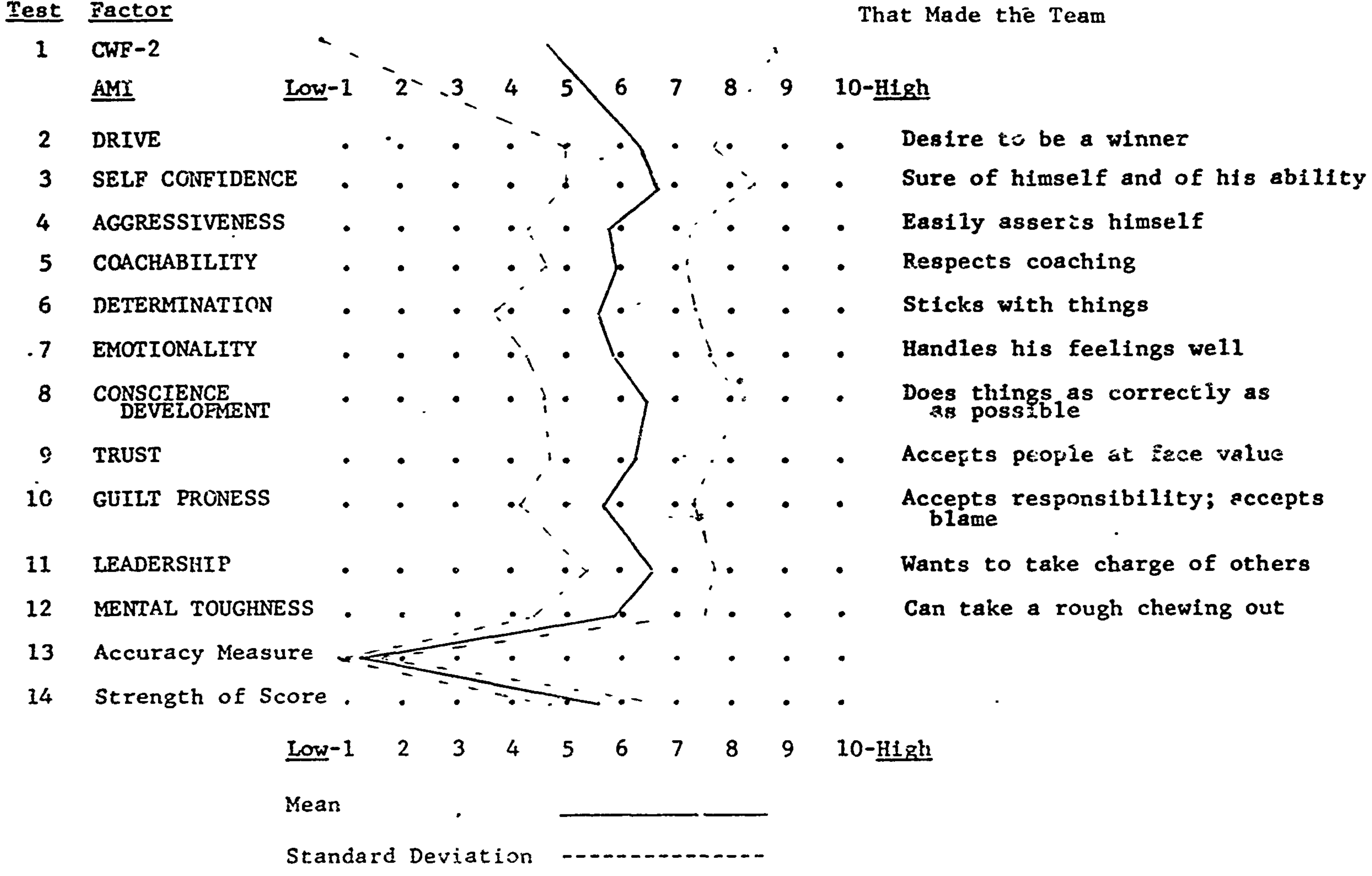


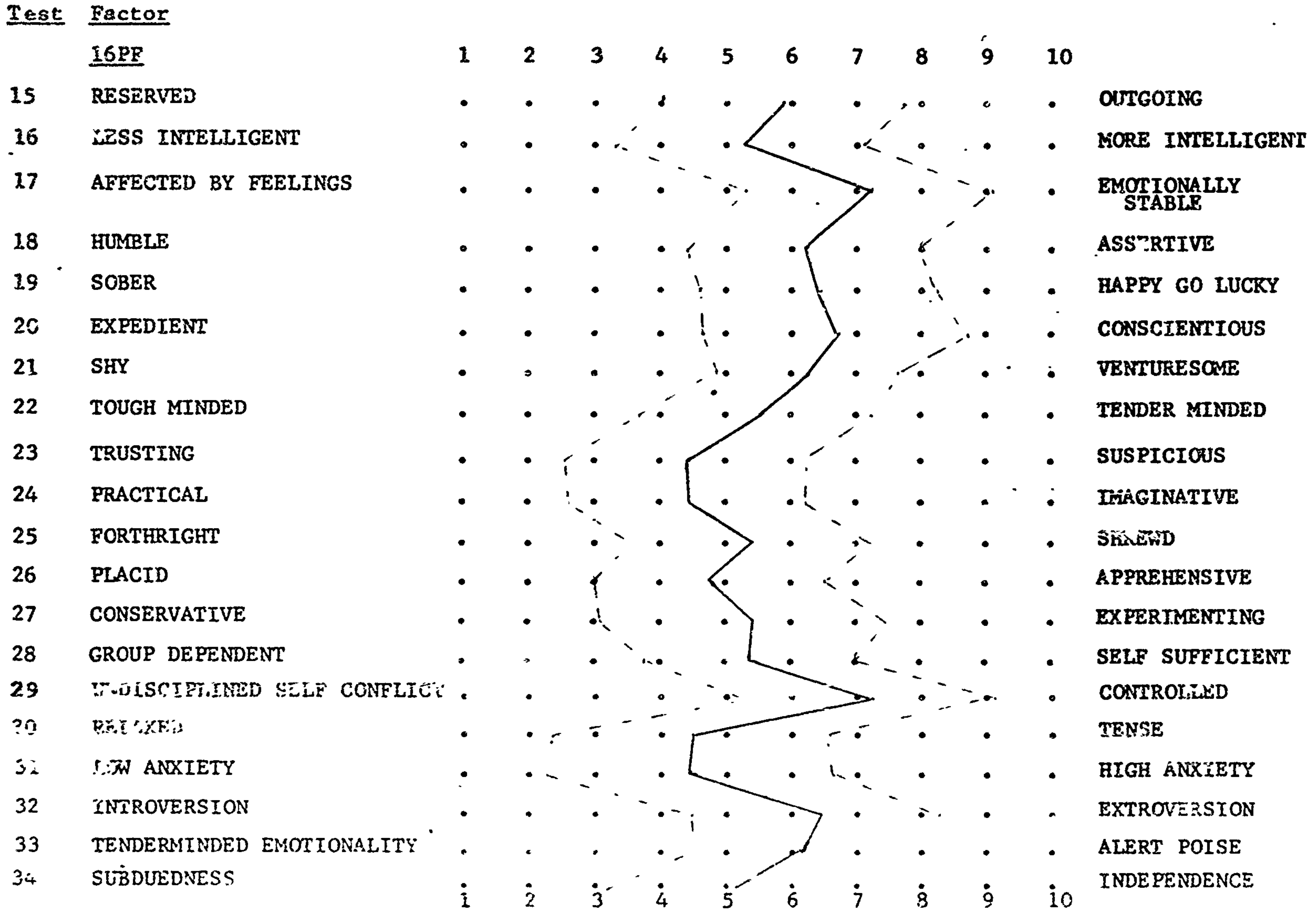

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
16 LESS INTELLIGENT
17 AFFECTED BY FEELINGS
18 HUMBLE
19 SOBER
20 EXPEDIENT
21 SHY
22 TOUGH MINDED
23 TRUSTING
24 PRACTICAL
25 FORTHRIGHT
26 PLACID
27 CONSERVATIVE
28 GROUP DEPENDENT
29 UNDISCIPLINED SELF CONFLICT
30 RELAXED
31 LOW ANXIETY
32 INTROVERSION
33 TENDERMINDED EMOTIONALITY
34 SUBDUEDNESS
OUTGOING
MORE INTELLIGENT
EMOTIONALLY STABLE
ASSERTIVE
HAPPY GO LUCKY
CONSCIENTIOUS
VENTURESOME
TENDER MINDED
SUSPICIOUS
IMAGINATIVE
SHREWD
APPREHENSIVE
EXPERIMENTING
SELF SUFFICIENT
CONTROLLED
TENSE
HIGH ANXIETY
EXTROVERSION
ALERT POISE
INDEPENDENCE

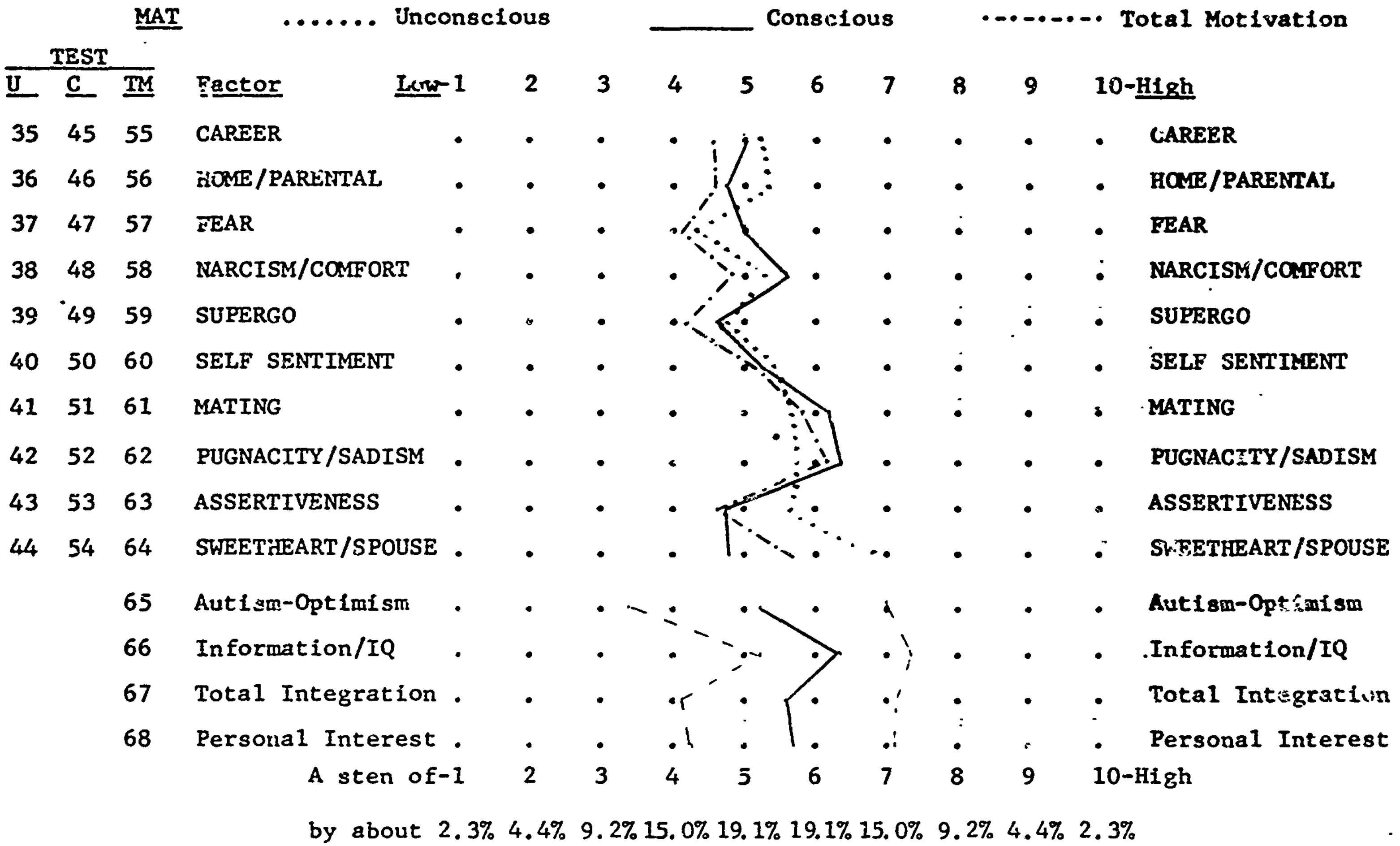


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appendix W TRID 17 Profile - The Final 62 Players That Made the Team

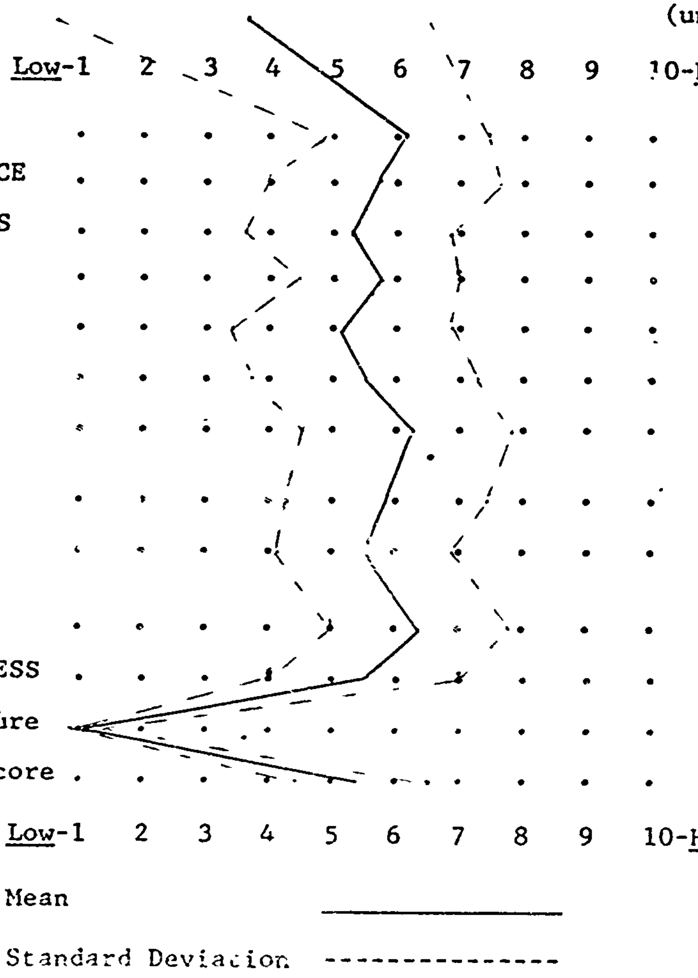



Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UN-DISCIPLINED SELF CONFLICT
CONTROLLED
30
RELAXED
TENSE
31
LOW ANXIETY
HIGH ANXIETY
32
INTROVERSION
EXTROVERSION
33
TENDERMINDED EMOTIONALITY
ALERT POISE
34
SUBDUEDNESS
INDEPENDENCE
1
2
3
4
5
6
7
8
9
10

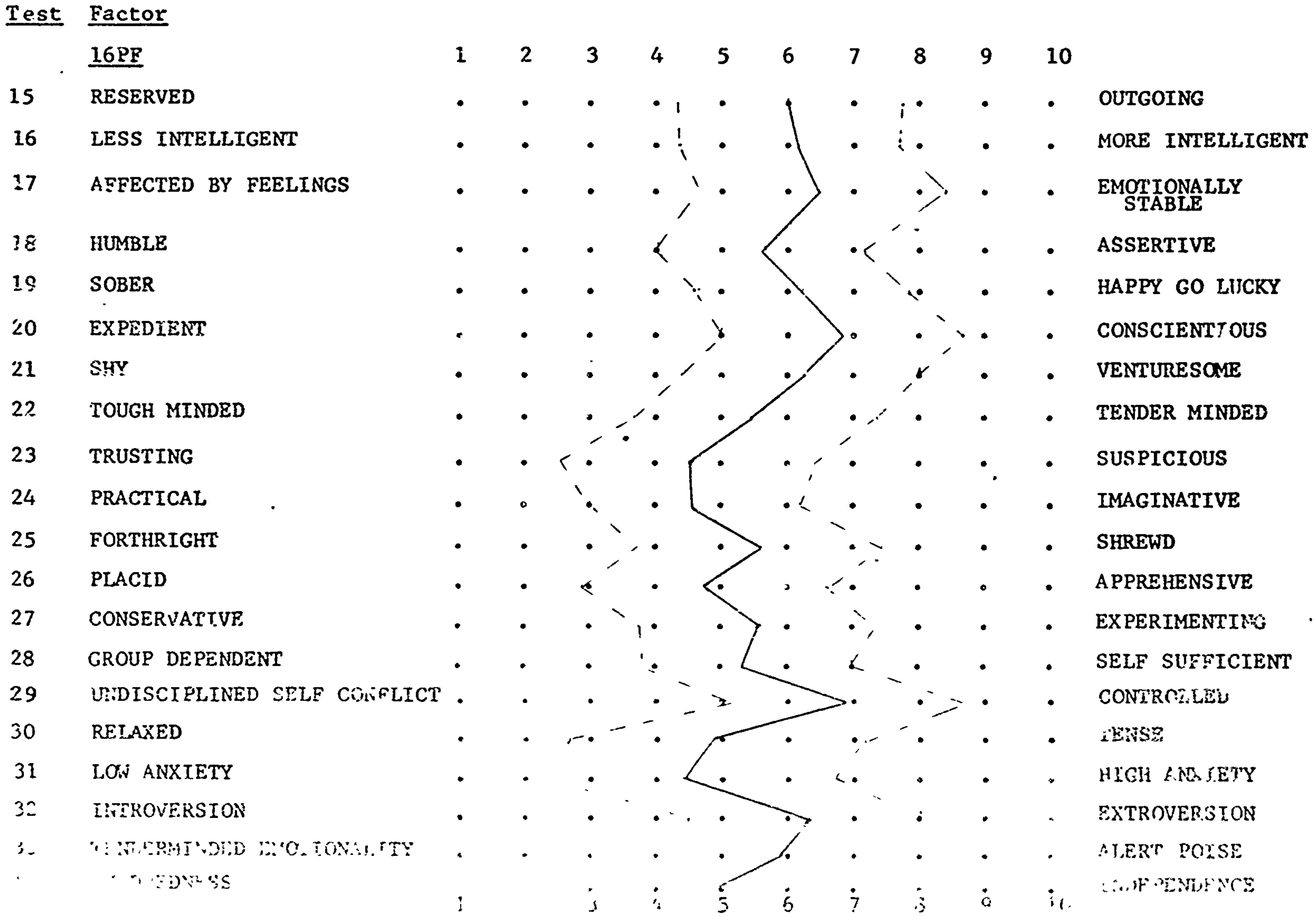


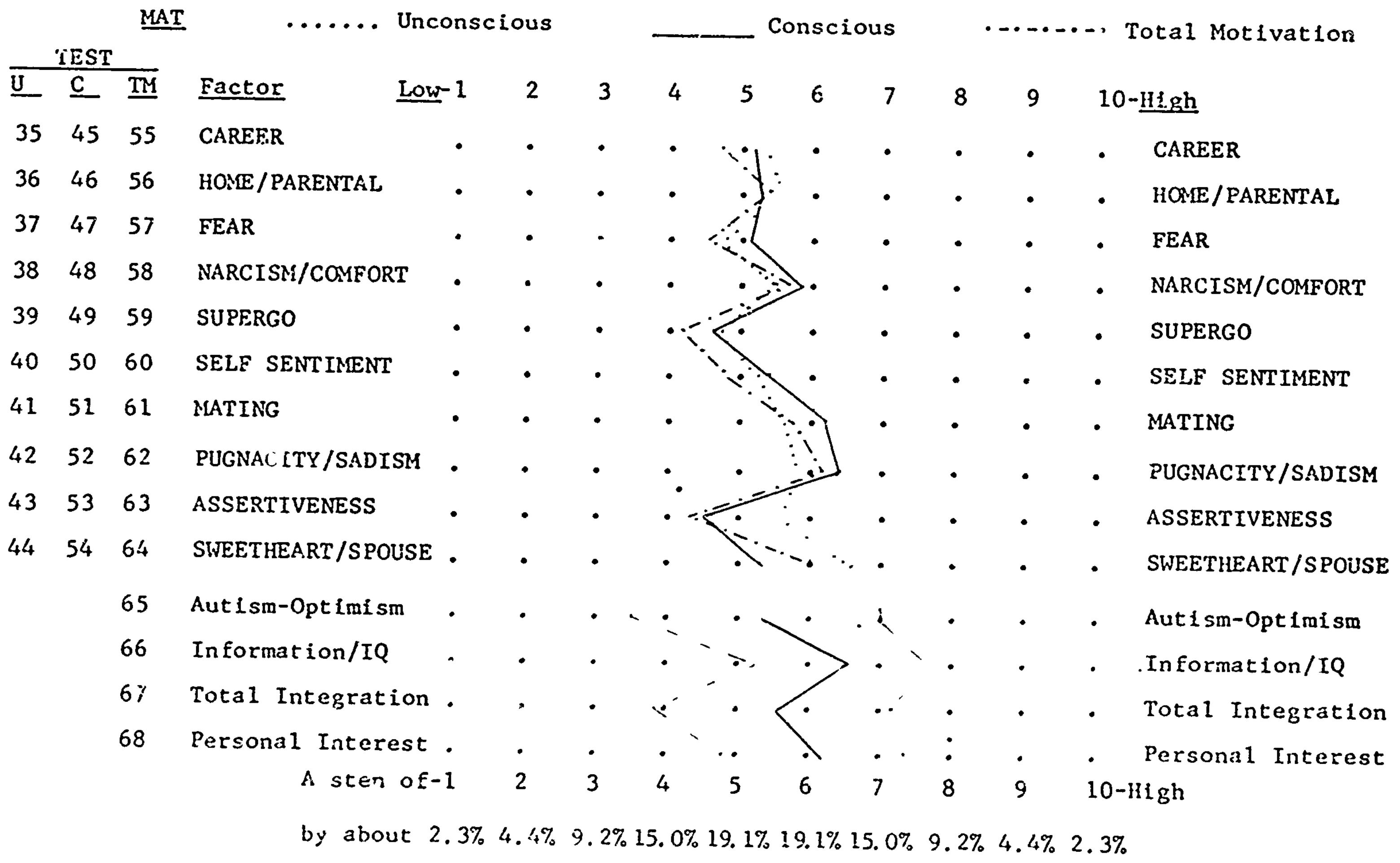
Note. The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appendix X TRID 18 Profile - The 180 men who did not make the final team, (unsuccessful players).



Test	Factor	
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13	Accuracy Measure	
14	Strength of Score	


Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED — OUTGOING
16 LESS INTELLIGENT — MORE INTELLIGENT
17 AFFECTED BY FEELINGS — EMOTIONALLY STABLE
18 HUMBLE — ASSERTIVE
19 SOBER — HAPPY GO LUCKY
20 EXPEDIENT — CONSCIENTIOUS
21 SHY — VENTURESOME
22 TOUGH MINDED — TENDER MINDED
23 TRUSTING — SUSPICIOUS
24 PRACTICAL — IMAGINATIVE
25 FORTHRIGHT — SHREWD
26 PLACID — APPREHENSIVE
27 CONSERVATIVE — EXPERIMENTING
28 GROUP DEPENDENT — SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT — CONTROLLED
30 RELAXED — TENSE
31 LOW ANXIETY — HIGH ANXIETY
32 INTROVERSION — EXTROVERSION
33 TENDERMINDED EMOTIONALITY — ALERT POISE
SUBDUEDNESS — INDEPENDENCE
1
3
4
5
6
7
8
9
10



The above profile represents mean scores with standard deviation scores for the "MAT" to be found in table [illegible] for the "unconscious" scores; in table [illegible] for the "conscious" [illegible] total motivation scores."

Appx. No. 1 - MAT "Unconscious" Standard Deviation Scores for "TRID" Files

T = TRID

	Files																	
TEST	T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	T 9	T 10	T 11	T 12	T 13	T 14	T 15	T 16	T 17	T 18
35	1.69	1.71	1.61	1.08	1.81	1.87	1.77	1.82	1.74	1.61	1.63	1.50	1.48	1.64	1.08	1.61	1.81	1.53
36	1.95	1.96	1.93	1.95	1.69	1.77	1.38	1.95	1.76	2.34	1.58	2.30	2.01	2.97	2.18	2.01	1.84	2.03
37	1.95	1.92	2.01	1.44	2.23	1.98	1.90	1.88	1.86	1.90	2.27	2.06	2.21	2.51	2.21	2.04	1.98	2.05
38	1.86	1.88	1.82	1.29	2.43	1.39	1.57	1.94	2.14	2.06	1.82	1.95	1.53	1.73	1.61	1.85	1.79	1.90
39	1.93	1.92	1.94	1.66	2.01	1.53	2.06	1.75	2.13	1.91	2.06	1.95	1.47	1.92	1.12	1.82	1.96	1.78
40	1.68	1.71	1.61	1.42	1.25	1.86	1.68	1.93	1.75	1.58	1.66	1.87	1.38	.84	2.20	1.65	1.58	1.67
41	1.80	1.79	1.83	1.68	1.71	1.72	1.13	1.71	1.68	1.57	1.79	2.00	1.73	1.14	1.86	1.76	1.90	1.75
42	2.04	2.02	2.10	2.84	1.94	1.74	2.69	2.12	1.93	1.72	2.09	2.45	2.19	1.48	2.37	2.12	1.95	2.18
43	1.78	1.78	1.76	1.39	1.72	1.71	1.51	1.59	1.74	1.94	1.80	1.75	1.95	1.92	1.55	1.75	1.97	1.68
44	1.95	1.94	1.97	2.15	2.05	1.73	1.21	2.13	2.25	1.90	1.91	1.89	2.02	1.30	1.83	1.96	1.80	2.00

Appx. No. 2 - MAT "Conscious" Standard Deviation Scores for "TRID" Files

T = TRID

Files

TEST	T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	T 9	T 10	T 11	T 12	T 13	T 14	T 15	T 16	T 17	T 18
45	1.72	1.70	1.81	1.86	2.07	1.39	2.23	1.87	1.50	1.68	1.85	2.01	1.66	1.64	2.65	1.85	1.74	1.90
46	1.69	1.69	1.71	2.31	1.31	1.81	1.99	.82	1.89	1.93	1.72	1.72	1.81	1.10	1.16	1.78	1.61	1.81
47	1.93	1.93	1.92	1.51	1.97	1.57	1.80	2.39	1.93	2.06	1.79	1.73	1.77	3.63	2.09	1.92	2.09	1.87
48	1.72	1.74	1.68	1.59	1.84	1.59	1.99	1.78	1.66	1.53	2.01	1.63	1.63	1.67	1.50	1.68	1.87	1.59
49	1.88	1.87	1.81	1.82	2.02	1.28	1.35	1.69	1.87	1.89	1.79	1.78	1.56	.84	2.05	1.73	1.70	1.75
50	1.38	1.38	1.35	1.35	1.74	1.31	1.72	1.21	1.21	1.47	1.57	1.29	1.33	1.52	1.34	1.38	1.18	1.45
51	1.69	1.65	1.83	2.02	2.07	1.87	1.89	1.92	1.81	1.81	1.23	2.00	1.65	.71	2.24	1.87	1.96	1.85
52	1.81	1.86	1.67	1.44	2.11	1.43	1.35	1.81	1.78	1.61	1.92	1.56	1.80	2.95	1.44	1.74	1.72	1.74
53	1.86	1.85	1.89	1.83	1.79	2.33	1.95	2.10	1.83	1.76	1.96	1.92	1.77	1.79	1.74	1.92	1.92	1.89
54	1.84	1.84	1.84	1.16	2.19	2.04	1.57	1.58	1.80	2.12	1.76	1.43	1.81	2.19	1.55	1.79	1.98	1.72

Appx. No. 3 - MAT "Total Motivation" Standard Deviation Scores for "TRID" Files

T = TRID

TEST	T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	T 9	T 10	T 11	T 12	T 13	T 14	T 15	T 16	T 17	T 18
	Files																	
55	2.31	2.29	2.38	2.43	2.89	1.90	2.89	2.59	2.36	2.18	2.06	2.29	2.35	.84	2.79	2.36	2.43	2.33
56	2.30	2.31	2.27	2.75	2.09	2.43	1.57	2.04	2.29	2.55	1.85	2.74	2.26	3.36	2.28	2.36	2.08	2.41
57	2.62	2.57	2.76	2.43	3.07	2.69	2.41	2.84	2.76	2.93	3.05	2.65	2.76	1.92	2.81	2.77	2.92	2.71
58	2.61	2.61	2.59	2.81	2.88	2.35	2.81	2.59	2.89	2.64	3.06	2.53	2.32	2.70	1.54	2.60	2.58	2.59
59	2.58	2.58	2.50	1.98	2.75	2.28	1.50	2.11	2.76	2.69	2.70	2.39	2.04	1.92	1.96	2.38	2.25	2.44
60	2.20	2.23	2.09	2.19	1.76	2.09	2.07	2.43	2.04	2.17	2.18	1.95	1.95	1.41	2.46	2.05	1.74	2.15
61	2.36	2.36	2.37	2.31	2.70	2.46	2.69	2.45	2.33	2.25	2.25	1.38	2.13	1.10	2.31	2.41	2.52	2.41
62	2.61	2.61	2.60	2.84	2.71	2.36	2.76	2.39	2.40	2.44	2.71	2.87	2.95	1.82	2.69	2.63	2.47	2.68
63	2.50	2.52	2.45	2.02	1.59	2.58	1.62	2.33	2.45	2.17	2.64	2.72	2.56	2.77	2.72	2.45	2.48	2.41
64	2.56	2.52	2.66	2.30	3.12	2.66	2.07	2.69	2.51	2.73	2.13	2.50	2.45	2.70	2.10	2.54	2.77	2.48

Appx. No. 4 - "TRID" LINE SUMMARIES FROM ANALYSIS OF VARIANCE

Run #	Group 1	Group 2	# in Group 1	# in Group 2	DEGREES OF FREEDOM Among Columns (V1)	DEGREES OF FREEDOM Error Within (V2)
1	TRID 1	TRID 2	1299	980	1	2277
2		TRID 3	1299	320	1	1617
3		TRID 4	1299	12	1	1309
4		TRID 5	1299	20	1	1317
5		TRID 6	1299	20	1	1317
6		TRID 7	1299	7	1	1304
7		TRID 8	1299	21	1	1318
8		TRID 9	1299	26	1	1323
9		TRID 10	1299	26	1	1323
10		TRID 11	1299	20	1	1317
11		TRID 12	1299	33	1	1330
12		TRID 13	1299	38	1	1335
13		TRID 14	1299	5	1	1302
14		TRID 15	1299	14	1	1311
15		TRID 16	1299	242	1	1539
16		TRID 17	1299	62	1	1359
17	TRID 2	TRID 3	980	320	1	1298
18		TRID 4	980	12	1	990
19		TRID 5	980	20	1	998
20		TRID 6	980	20	1	998
21		TRID 7	980	7	1	985
22		TRID 3	980	21	1	999
23		TRID 9	980	26	1	1004
24		TRID 10	980	26	1	1004
25		TRID 11	980	20	1	998
26		TRID 12	980	33	1	1011
27		TRID 13	980	38	1	1016
28		TRID 14	980	5	1	983
29		TRID 15	980	14	1	992
30		TRID 16	980	242	1	1220
31		TRID 17	980	62	1	1040
32	TRID 3	TRID 4	320	12	1	330
33		TRID 5	320	20	1	338
34		TRID 6	320	20	1	338
35		TRID 7	320	7	1	325
36		TRID 8	320	21	1	339
37		TRID 9	320	26	1	344
38		TRID 10	320	26	1	344
39		TRID 11	320	20	1	338
40		TRID 12	320	33	1	351
41		TRID 13	320	38	1	356
42		TRID 14	320	5	1	323
43		TRID 15	320	14	1	332
44		TRID 16	320	242	1	560

					DEGREES OF FREEDOM	
Run #	Group 1	Group 2	# in Group 1	# in Group 2	Among Columns (V1)	Error Within (V2)
45	TRID 3	TRID 17	320	62	1	380
46	TRID 4	TRID 5	12	20	1	30
47		TRID 6	12	20	1	30
48		TRID 7	12	7	1	17
49		TRID 8	12	21	1	31
50		TRID 9	12	26	1	36
51		TRID 10	12	26	1	36
52		TRID 11	12	20	1	30
53		TRID 12	12	33	1	43
54		TRID 13	12	38	1	48
55		TRID 14	12	5	1	15
56		TRID 15	12	14	1	24
57		TRID 16	12	242	1	252
58		TRID 17	12	62	1	72
59	TRID 5	TRID 6	20	20	1	38
60		TRID 7	20	7	1	25
61		TRID 8	20	21	1	39
62		TRID 9	20	26	1	44
63		TRID 10	20	26	1	44
64		TRID 11	20	20	1	38
65		TRID 12	20	33	1	51
66		TRID 13	20	38	1	56
67		TRID 14	20	5	1	23
68		TRID 15	20	14	1	32
69		TRID 16	20	242	1	260
70		TRID 17	20	62	1	80
71	TRID 6	TRID 7	20	7	1	25
72		TRID 8	20	21	1	39
73		TRID 9	20	26	1	44
74		TRID 10	20	26	1	44
75		TRID 11	20	20	1	38
76		TRID 12	20	33	1	51
77		TRID 13	20	38	1	56
78		TRID 14	20	5	1	23
79		TRID 15	20	14	1	32
80		TRID 16	20	242	1	26
81		TRID 17	20	62	1	80
82	TRID 7	TRID 8	7	21	1	26
83		TRID 9	7	26	1	31
84		TRID 10	7	26	1	31
85		TRID 11	7	20	1	25
86		TRID 12	7	33	1	25
87		TRID 13	7	38	1	43
88		TRID 14	7	5	1	10
89		TRID 15	7	14	1	19
90		TRID 16	7	242	1	247

					DEGREES OF FREEDOM	
Run #	Group 1	Group 2	# in Group 1	# in Group 2	Among Columns (V1)	Error Within (V2)
91	TRID 7	TRID 17	7	62	1	67
92	TRID 8	TRID 9	21	26	1	45
93		TRID 10	21	26	1	45
94		TRID 11	21	20	1	39
95		TRID 12	21	33	1	52
96		TRID 13	21	38	1	57
97		TRID 14	21	5	1	24
98		TRID 15	21	14	1	33
99		TRID 16	21	242	1	261
100		TRID 17	21	62	1	81
101	TRID 9	TRID 10	26	26	1	50
102		TRID 11	26	20	1	44
103		TRID 12	26	33	1	57
104		TRID 13	26	38	1	62
105		TRID 14	26	5	1	29
106		TRID 15	26	14	1	38
107		TRID 16	26	242	1	266
108		TRID 17	26	62	1	86
109	TRID 10	TRID 11	26	20	1	44
110		TRID 12	26	33	1	57
111		TRID 13	26	38	1	62
112		TRID 14	26	5	1	29
113		TRID 15	26	14	1	38
114		TRID 16	26	242	1	266
115		TRID 17	26	62	1	86
116	TRID 11	TRID 12	20	33	1	51
117		TRID 13	20	38	1	56
118		TRID 14	20	5	1	23
119		TRID 15	20	14	1	32
120		TRID 16	20	242	1	260
121		TRID 17	20	62	1	80
122	TRID 12	TRID 13	33	38	1	69
123		TRID 14	33	5	1	36
124		TRID 15	33	14	1	45
125		TRID 16	33	242	1	273
126		TRID 17	33	62	1	93
127	TRID 13	TRID 14	38	5	1	41
128		TRID 15	38	14	1	50
129		TRID 16	38	242	1	278
130		TRID 17	38	62	1	98
131	TRID 14	TRID 15	5	14	1	17
132		TRID 16	5	242	1	245
133		TRID 17	5	62	1	65
134	TRID 15	TRID 16	14	242	1	254
135		TRID 17	14	62	1	74
136	TRID 16	TRID 17	242	62	1	302
137	TRID 17	TRID 18	62	180	1	240

Appx. No. 5 - ANALYSIS OF VARIANCE

F STATISTICS

V2	.1	.05	.025	.01
1	39.86	161.4	647.8	405.2
2	8.53	18.51	38.51	98.50
3	5.54	10.13	17.44	34.12
4	4.54	7.71	12.22	21.20
5	4.06	6.61	10.01	16.26
6	3.78	5.99	8.81	13.75
7	3.59	5.59	8.07	12.25
8	3.46	5.32	7.57	11.26
9	3.36	5.12	7.21	10.56
10	3.29	4.96	6.94	10.04
11	3.23	4.84	6.72	9.65
12	3.18	4.75	6.55	9.33
13	3.14	4.67	6.41	9.07
14	3.10	4.60	6.30	8.86
15	3.07	4.54	6.20	8.68
16	3.05	4.49	6.12	8.53
17	3.03	4.45	6.04	8.40
18	3.01	4.41	5.98	8.29
19	2.99	4.38	5.92	8.18
20	2.97	4.35	5.87	8.10
21	2.96	4.32	5.83	8.02
22	2.95	4.30	5.79	7.95
23	2.94	4.28	5.75	7.88
24	2.93	4.26	5.72	7.82
25	2.92	4.24	5.69	7.77
26	2.91	4.23	5.65	7.72
27	2.90	4.21	5.63	7.68
28	2.89	4.20	5.61	7.64
29	2.89	4.18	5.59	7.60
30	2.88	4.17	5.57	7.56
40	2.84	4.08	5.42	7.31
60	2.79	4.00	5.29	7.08
120	2.75	3.92	5.15	6.85
∞	2.71	3.84	5.02	6.63

from CRC Tables (1968)

APPENDIX NO. 6

Appendix No. 6 consists of table nos. 6a through and including 6p.

In these tables, each number under the levels of significance represents one of the 68 factors from the test battery. The letter following each number shows the group with the significantly higher scores on the factor represented by that number. If the letter is A, the underlined group at the top of the column with the(A) following it, had the higher scores for that factor If the letter is B, the group in the left column that is in the same row as the number, and is followed by a (B), had the higher scores.

Table No. 6a - ANALYSIS OF VARIANCE ON "TRID" FILES (TRID 1 vs. TRID 2 through TRID 17)

Entire Class (A) vs/	LEVELS OF SIGNIFICANCE .05	.025	.01
Those who didn't go out first day (B)	10A		2A,4A
First Day			2B,3B,4B,10B,11B,14B
Football Turnout (B)	24A,49A	65A	16A,39A,59A
Centers (B)	2B,22A	14B,33B	4B,10B
Guards (B)		2B,10B	4B,66A,68A
Tackles (B)	53B,55A	4B	
Tight Ends (B)	6B,14B		
Running Backs(B)	10B,15B,22B,29A,63A	1B,4B,34A,65A	28A,68A
Wide Receivers (B)	26A,30A,66A	50A	61A
Quarterbacks (B)	45B,51B	2B,20A,23B	3B,31B
Defensive Ends (B)	2B		4B
Linebackers (B)		11B	2B,3B,4B
Defensive Backs (B)	11B,41B,51B,58B	2B,3B,39A	4B,46A,59A,61B,65A
Specialists (B)	63B	9B,61B	51B
Managers (B)	64A		
Players Remaining at End of Summer (B)	50A,59A	24A,60A,66A,68A	2B,3B,4B,10B,11B,65A
Final 62 Players (B)	14B,37A	7B,12B,17B,66A,68A	2B,3B,4B,10B,11B 16A

Table No.6b - TRID 2 vs. TRID 3 through TRID 17

LEVELS OF SIGNIFICANCE

Those who didn't go out first day (A) vs./	.05	.025	.01
First Day Football Turnout (B)	5B,12B,19B,25A,28A	20A,50A,66A,68A	2B,3B,4B,10B,11B,14B,16A, 24A,39A,49A,59A,65A
Centers (B)	11B,16B,22A,24A	14B,33B	2B,4B,10B
Guards (B)	65A		2B,4B,10B,66A,68A
Tackles (B)	20A,53B,55A		4B
Tight Ends (B)	3B,4B,6B	14B	
Running Backs (B)	2B,19B,22B,29A,63A	1B,10B,15B	4B,28A,34A,65A,68A
Wide Receivers (B)	3B,26A,30A,41A,66A	4B,61A	50A
Quarterbacks (B)	4B,11B,12B,45B,51B	23B	2B,3B,20A,31B
Defensive Ends (B)	3B,11B,47B	15A	2B,4B
Linebackers (B)			2B,3B,4B,39A,46A,59A,61B,65A
Defensive Backs (B)	24A,37A,49A,58B,60A	11B,51B	51B
Specialists (B)	63B	9B,61B	
Managers (B)	64A		
Players Remaining at end of Summer	19B,28A	14B,16A,20A,39A,50A	2B,3B,4B,10B,11B,12B,24A,59A, 60A,65A,66A,68A
Final 62 Players (B)	1B,37A,46A	7B,14B,17B,65A	2B,3B,4B,10B,11B,12B,16A,66A, 68A

Table No. 6c - TRID 3 vs. TRID 4 through TRID 17

LEVELS OF SIGNIFICANCE

First Day Football Turnout (A) vs/	.05	.025	.01
Centers (B)	10B,18B,22A,66B	33B	
Guards (B)	66A	68A	
Tackles (B)	53B,55A		
Tight Ends (B)			
Running Backs (B)	34A,68A		28A
Wide Receivers (B)	26A,30A	61A	
Quarterbacks (B)	23B,31B		
Defensive Ends (B)			15A
Linebackers (B)			
Defensive Backs		46A,58B,61B	
Specialists (B)	63B	9B,10A,51B,61B	
Managers (B)	64A	25B	
Players Remaining at end of Summer (B)			
Final 62 Players	16A,17B		3B

Table No. 6d- TRID 4 vs. TRID 5 through TRID 17

Centers (A) vs/	LEVELS OF SIGNIFICANCE .05	.025	.01
Guards (B)	11A	14A,33A	66A,68A
Tackles (B)	10A,14A,24B,33A,55A	11A,18A,35A	
Tight Ends (B)	43A		
Running Backs (B)	18A,65A	68A	22A,33A
Wide Receivers (B)	33A,66A	14A,18A,22B,50A	
Quarterbacks (B)	4A,16B,33A		
Defensive Ends (B)			
Linebackers (B)			
Defensive Backs (B)	18A,65A,66A	10A	
Specialists (B)	61B	9B	10A
Managers (B)	11A,16B	4A,24A,64A	39B
Players remaining at end of summer (B)	10A,18A,22B,33A,66A		
Final 62 Players (B)	22B,68A	66A	

Table No. 6e - TRID 5 vs. TRID 6 through TRID 17

Guards (A) vs/	LEVELS OF SIGNIFICANCE .05	.025	.01
Tackles (B)		53B,63B	
Tight Ends (B)	14B	6B	
Running Backs (B)		28A	
Wide Receivers (B)	26A,30A		
Quarterbacks (B)	3B,56B	66B	68B
Defensive Ends (B)	15A	11B	66B,68B
Linebackers (B)	11B,68B		
Defensive Backs (B)	10A,12B,36B,38B,58B,66B		68B
Specialists (B)	9B,17B,51B,61B	53B	10A,63B
Managers (B)	39B,56B		
Players remaining at end of summer (B	66B	68B	
Final 62 Players (B)	7B	17B	3B,11B

Table No.6f - TRID 6 vs. TRID 7 through TRID 17

LEVELS OF SIGNIFICANCE

Tackles (A) vs/	.05	.025	.01
Tight Ends (B)	3B,8B,20B	6B	
Running Backs (B)	53A	63A	22B
Wide Receivers (B)	7B		
Quarterbacks (B)	31B,68B	23B,55B	45B
Defensive Ends (B)	36A,47B		11B
Linebackers (B)	7B	11B	
Defensive Backs (B)	11B,39A,55B		
Specialists (B)		9B,10A,51B,61B	
Managers (B)	25B		
Players remaining at end of summer (B)			
Final 62 Players (B)	7B,18B		3B,11B

Table No. 6g - TRID 7 vs. TRID 8 through TRID 17

LEVELS OF SIGNIFICANCE

Tight Ends (A) vs/	.05	.025	.01
Running Backs (B)	6A,22B		
Wide Receivers (B)	14A		
Quarterbacks (B)	20A		
Defensive Ends (B)		47B	
Linebackers (B)			
Defensive Backs (B)	58B		
Specialists (B)	10A,43B	9B,63B	
Managers (B)	39B	44A	64A
Players remaining at end of summer (B)			
Final 62 Players (B)			

Table No. 6h - TRID 8 vs. TRID 9 through TRID 17

LEVELS OF SIGNIFICANCE

Running Backs (A) vs/	.05	.025	.01
Wide Receivers (B)	34B,61A	15A,28B,30A	
Quarterbacks (B)	45B	65B	28B,68B
Defensive Ends (B)	22A,34B	28B,68B	15A
Linebackers (B)		33B	22A
Defensive Backs (B)	29B,31A,34B,58B,63B,68B		28B
Specialists (B)	51B,53B,61B	10A,65B	9B,63B
Managers (B)	25B,39B	28B,34B	
Players remaining at end of summer (B)	1A,22A,33B,34B,63B,68B		28B
Final 62 Players (B)	29B,33B,34B	63B	28B

Table No. 6i - TRID 9 vs. TRID 10 through TRID 17

LEVELS OF SIGNIFICANCE

Wide Receivers (A) vs/	.05	.025	.01
Quarterbacks (B)	15B,41B,68B	23B,30B,31B,51B	[illegible]
Defensive Ends (B)			
Linebackers (B)	61B		
Defensive Backs (B)	59A		41B,5
Specialists (B)	41B		51B,
Managers (B)		26B	
Players remaining at end of summer (B)	41B		61B
Final 62 Players (B)	11B,14B,18B,26B,41B	61B	

Table No.6j - TRID 10 vs. TRID 11 through TRID 17

	LEVELS OF SIGNIFICANCE		
Quarterbacks (A) vs/	.05	.025	.01
Defensive Ends (B)	4B,16A,36A,45A		15A
Linebackers (B)	28A,31A	4B	
Defensive Backs (B)		65A	31A
Specialists (B)	10A,17B,31A,63B	45A	9B
Managers (B)	23A,25B,41A	61A	
Players remaining at end of summer (B)	45A,68A	31A	
Final 62 Players (B)	4B,17B,31A,45A	56A	16A,68A

Table No. 6k - TRID 11 vs. TRID 12 through TRID 17

	LEVELS OF SIGNIFICANCE		
Defensive Ends (A) vs/	.05	.025	.01
Linebackers (B)	15B		
Defensive Backs (B)	59A,61B	36B,39A	
Specialists (B)	10A	11A,61B	51B
Managers (B)	25B,36B	4A	11A
Players remaining at end of summer (B)		15B	
Final 62 Players (B)			

Table No. 6l- TRID 12 vs. TRID 13 through TRID 17

LEVELS OF SIGNIFICANCE

Linebackers (A) vs/	.05	.025	.01
Defensive Backs (B)	37A,46A,58B		
Specialists (B)	10A,51B	9B,61B	
Managers (B)	11A,64A	4A	25B
Players remaining at end of summer (B)			
Final 62 Players (B)	56A	37A	

Table No.6m - TRID 13 vs. TRID 14 through TRID 17

LEVELS OF SIGNIFICANCE

Defensive Backs (A) vs/	.05	.025	.01
Specialists (B)		9B	
Managers (B)	11A,46B,51A	58A	39A,41A,59B,61A
Players remaining at end of summer (B)	58A,61A		
Final 62 Players (B)			

Table No.6n - TRID 14 vs. TRID 15 through TRID 17

LEVELS OF SIGNIFICANCE

Specialists (A) vs/	.05	.025	.01
Managers (B)	9A,17A,41A,46B	10B,51A	61A
Players remaining at	63A	9A,10B,51A,61A	
end of summer (B)	9A,51A,61A	10B	
Final 62 Players			

Table No.6o - TRID 15 vs. TRID 16 through TRID 17

LEVELS OF SIGNIFICANCE

Managers (A) vs/	.05	.025	.01
Players remaining at	41B,64B	25A	
end of summer (B)		3B,16A,25A	11B
Final 62 Players (B)	4B,17B,56A		

Table No. 6p- TRID 16 vs. TRID 17

LEVELS OF SIGNIFICANCE

Players remaining at end of summer (A) vs/	.05	.025	.01
Final 62 Players (B)		16A	3B

Appx. No. 7 - LIST OF "1/9" COMPUTER FILES

1 Files - These are made up of those playing football at end of summer who <u>did</u> make the Final 62 Man cutoff

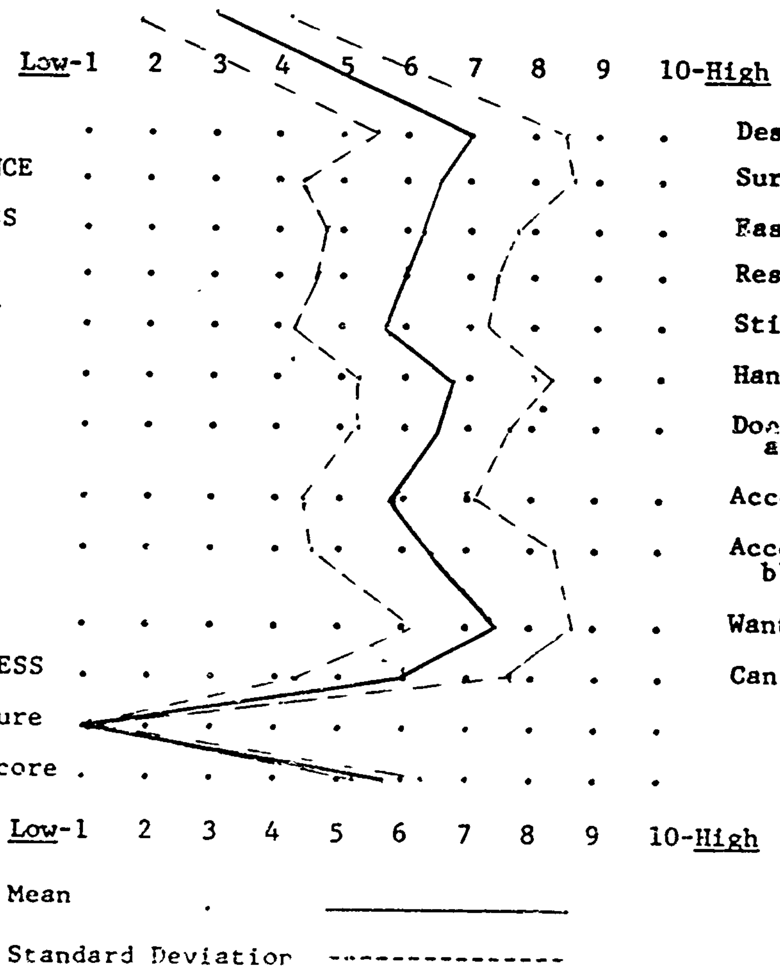
FILE NAME	DESCRIPTION
C1	Centers
G1	Guards
T1	Tackles
TE1	Tight Ends
RB1	Running Backs
WR1	Wide Receivers
QB1	Quarterbacks
DE1	Defensive Ends
LB1	Linebackers
DB1	Defensive Backs
SP1	Specialists

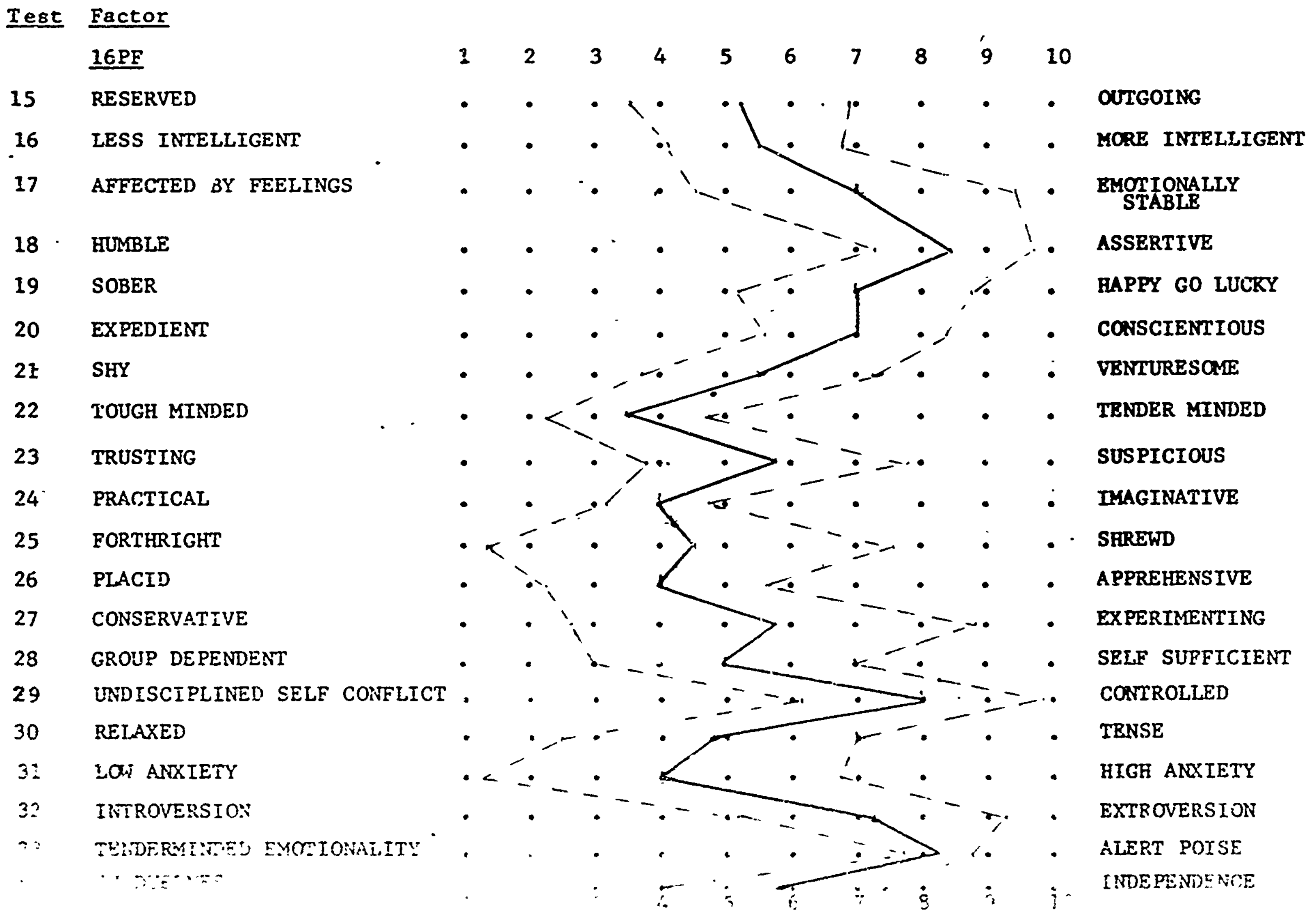
9 Files - These are made up of those playing football at end of summer who <u>did</u> <u>not</u> make the Final 62 Man cutoff

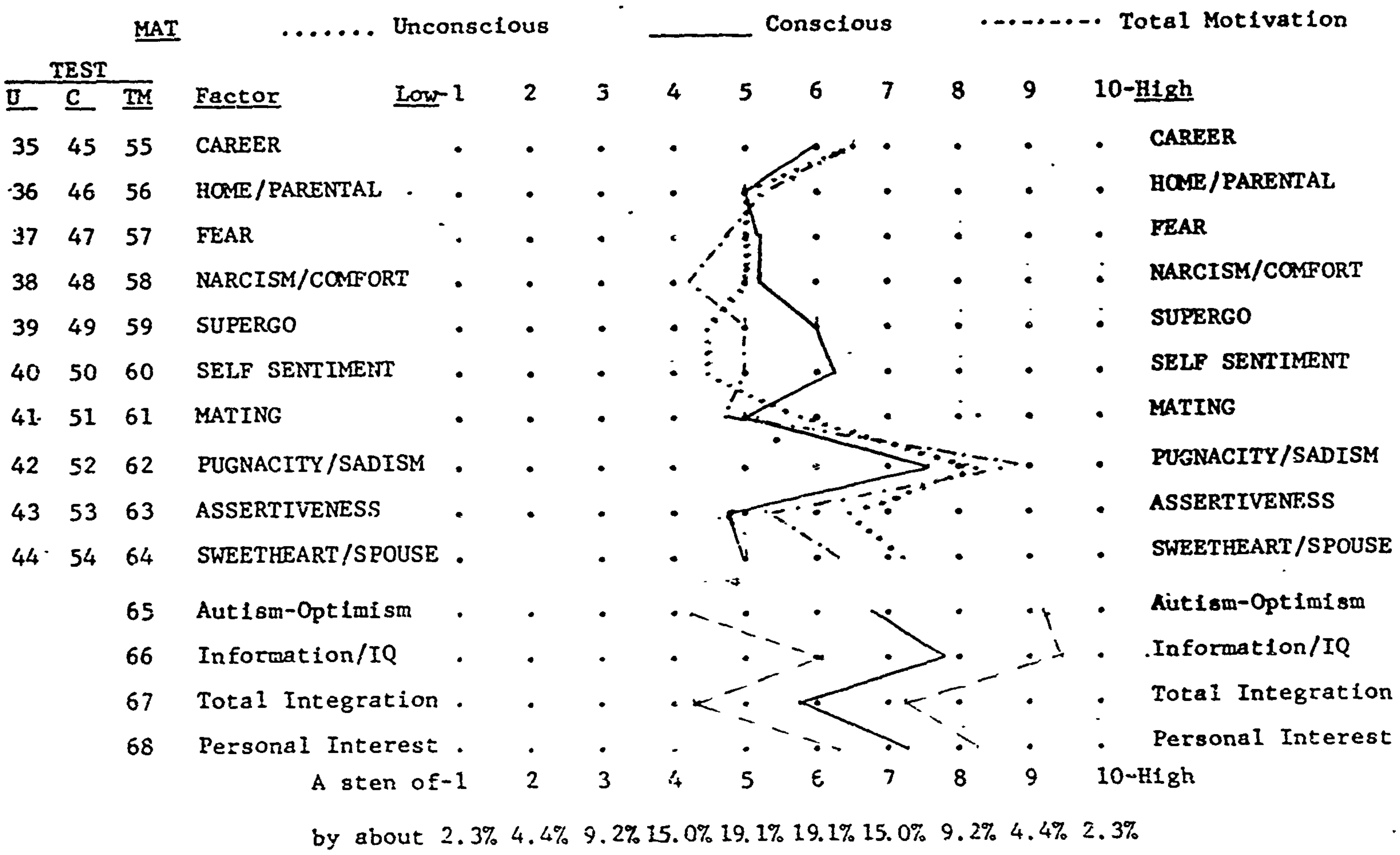
FILE NAME	DESCRIPTION
C9	Centers
G9	Guards
T9	Tackles
TE9	Tight Ends
RB9	Running Backs
WR9	Wide Receivers
QB9	Quarterbacks
DE9	Defensive Ends
LB9	Linebackers
DB9	Defensive Backs
SP9	Specialists

Appx. No. 8 C 1 Profile - Successful Centers

Test	Factor	
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13	Accuracy Measure	
14	Strength of Score	

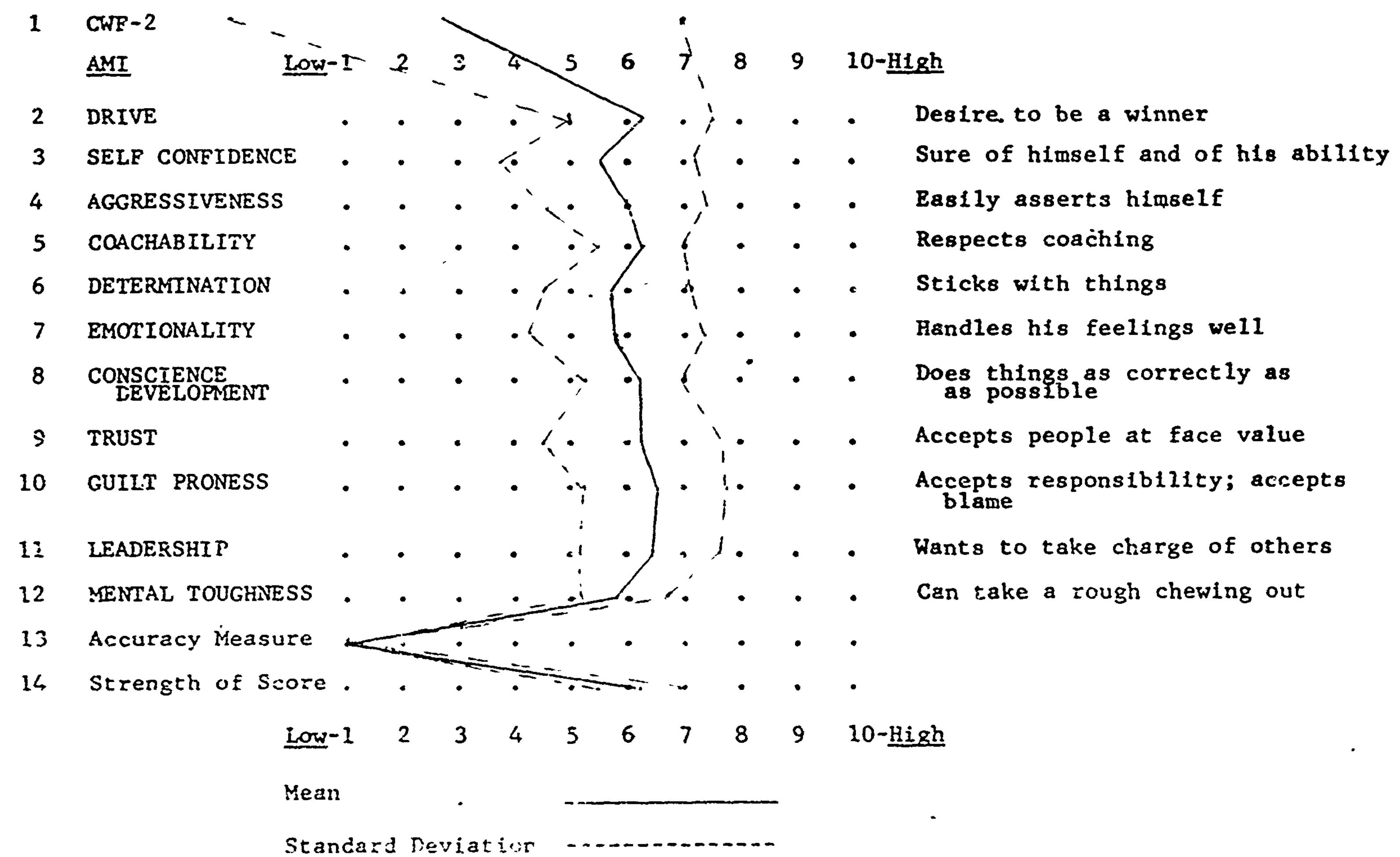



Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UNDISCIPLINED SELF CONFLICT
CONTROLLED
30
RELAXED
TENSE
31
LOW ANXIETY
HIGH ANXIETY
32
INTROVERSION
EXTROVERSION
33
TENDERMINDED EMOTIONALITY
ALERT POISE
SUBDUED
INDEPENDENCE



Note: The above profile represents mean scores with standard deviation scores for the [illegible] to be found in table [illegible] for the "unconscious" scores; in table for the "conscious" [illegible] total motivation scores."

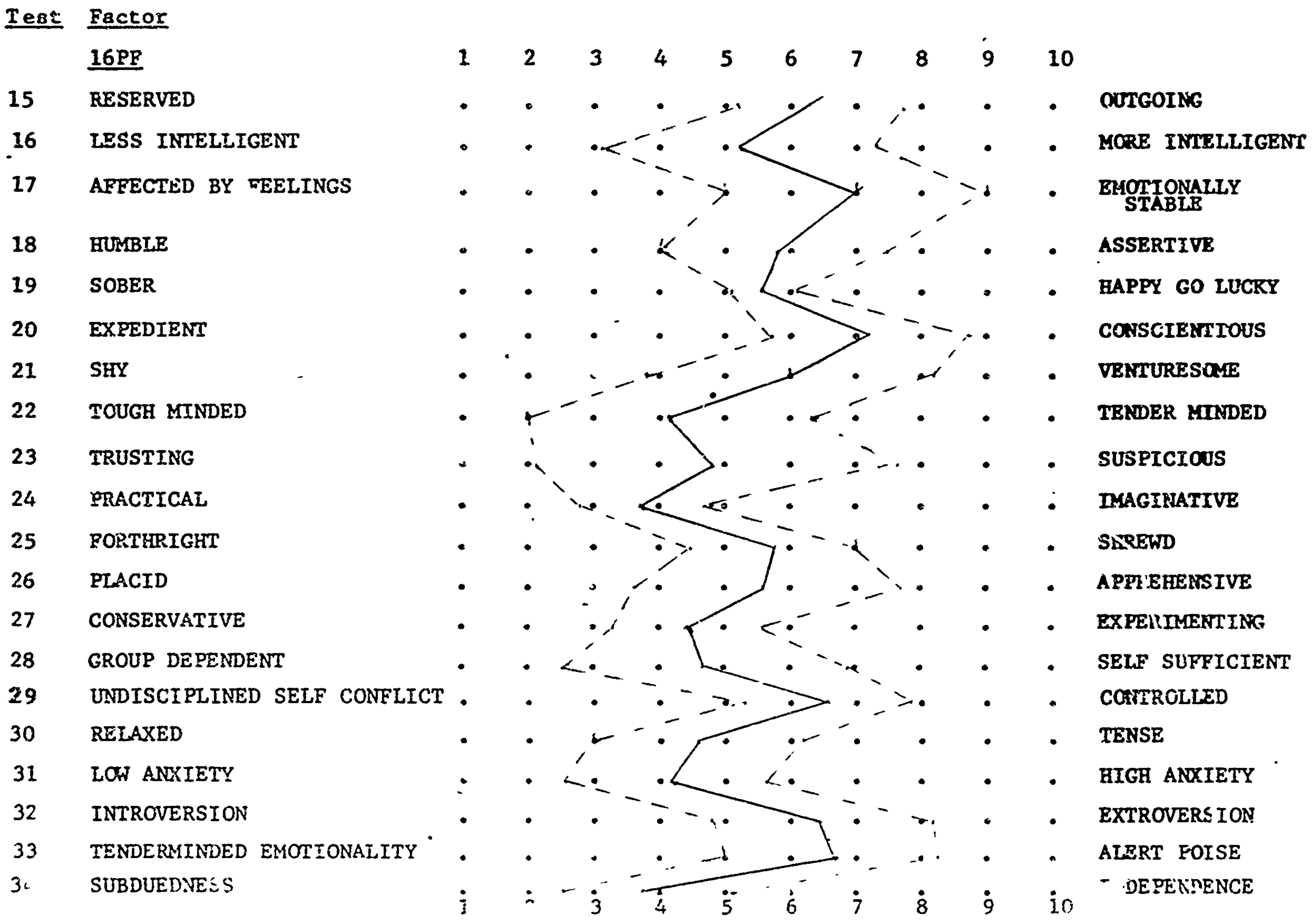
Appx. No. 9 C 9 Profile - Unsuccessful Centers

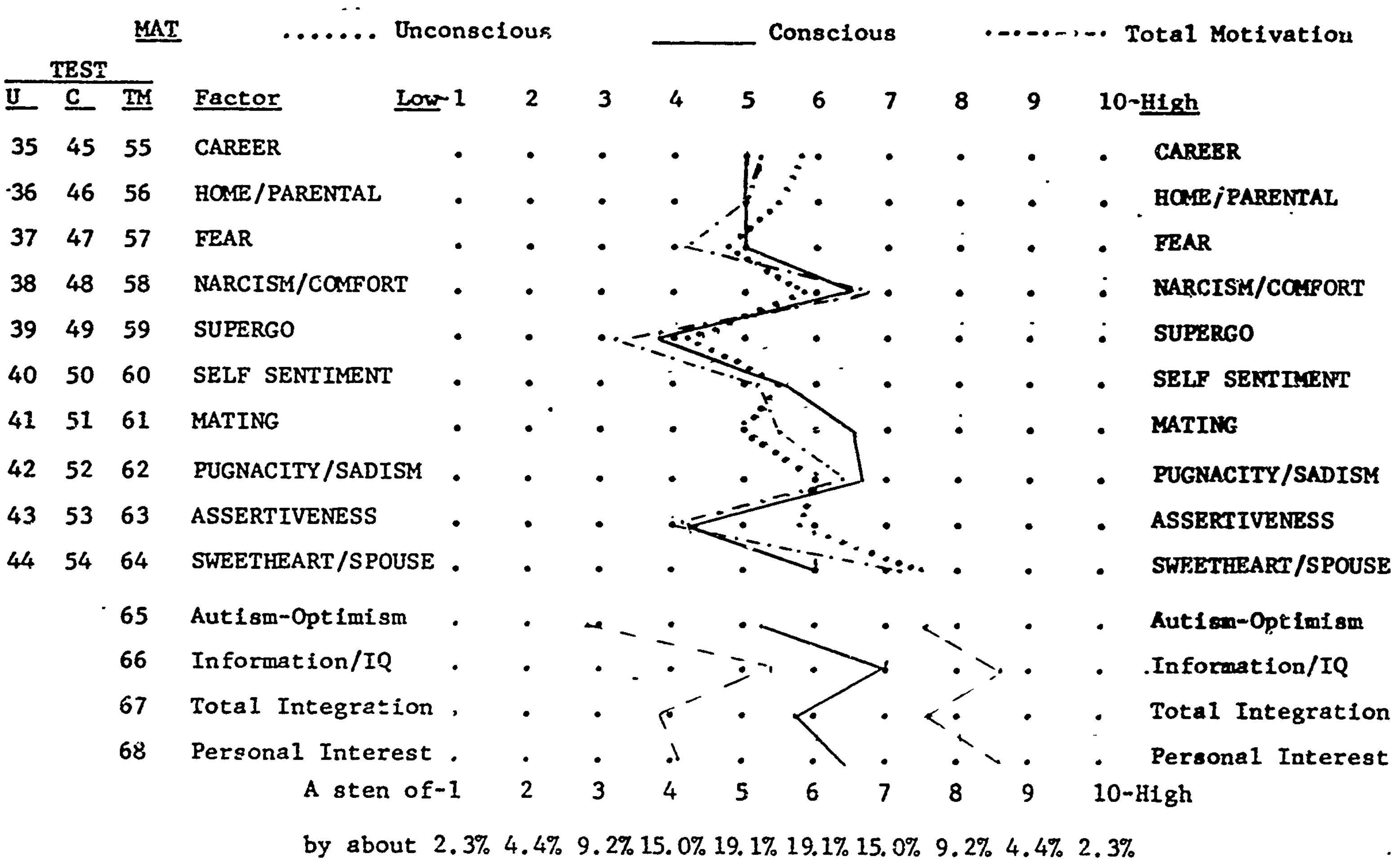


Test	Factor	Scale	Description
1	CWF-2		
	AMI	Low-1 2 3 4 5 6 7 8 9 10-High	
2	DRIVE		Desire to be a winner
3	SELF CONFIDENCE		Sure of himself and of his ability
4	AGGRESSIVENESS		Easily asserts himself
5	COACHABILITY		Respects coaching
6	DETERMINATION		Sticks with things
7	EMOTIONALITY		Handles his feelings well
8	CONSCIENCE DEVELOPMENT		Does things as correctly as as possible
9	TRUST		Accepts people at face value
10	GUILT PRONESS		Accepts responsibility; accepts blame
11	LEADERSHIP		Wants to take charge of others
12	MENTAL TOUGHNESS		Can take a rough chewing out
13	Accuracy Measure		
14	Strength of Score		
		Low-1 2 3 4 5 6 7 8 9 10-High	

Mean ————————

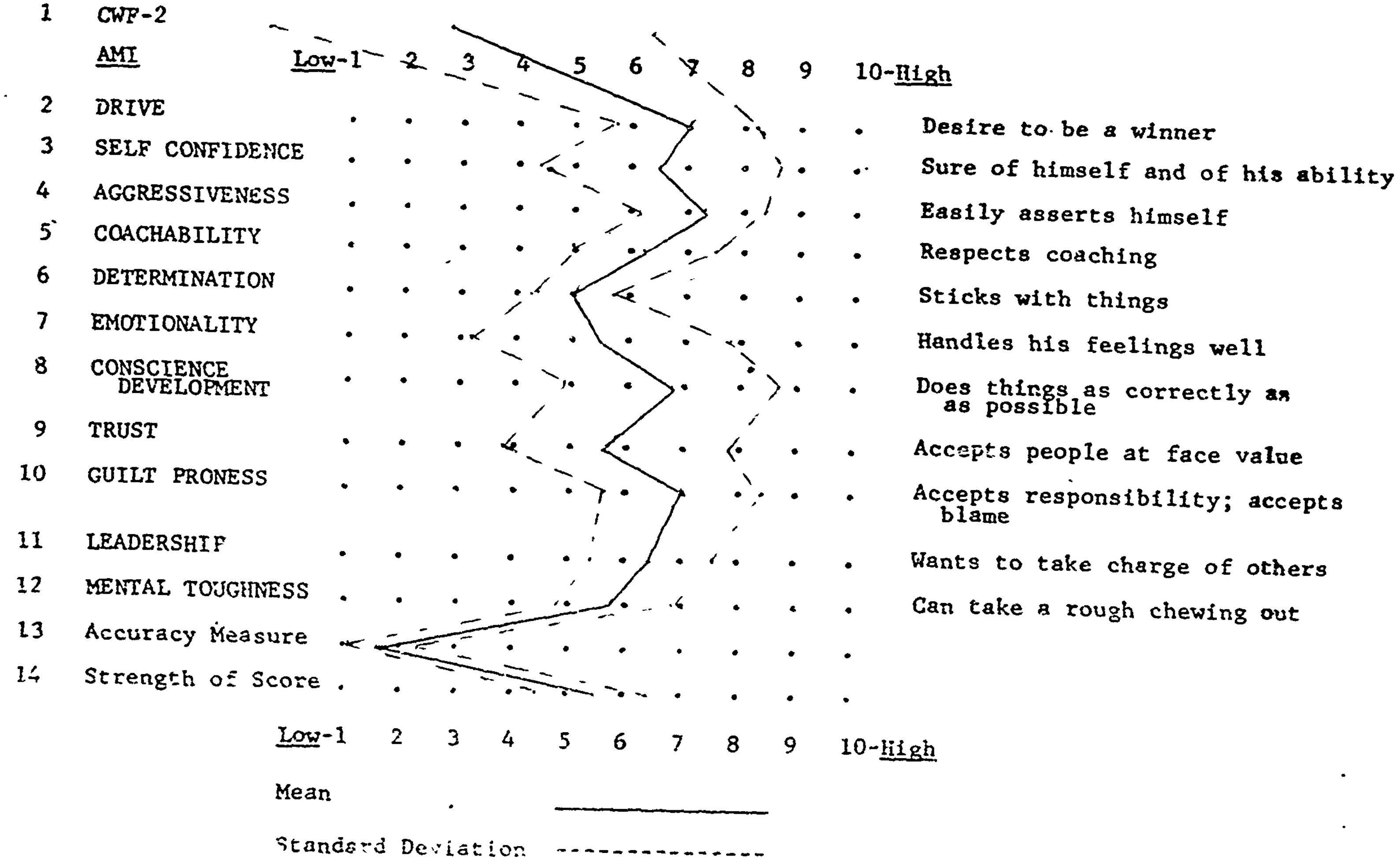
Standard Deviation - - - - - - - - - -

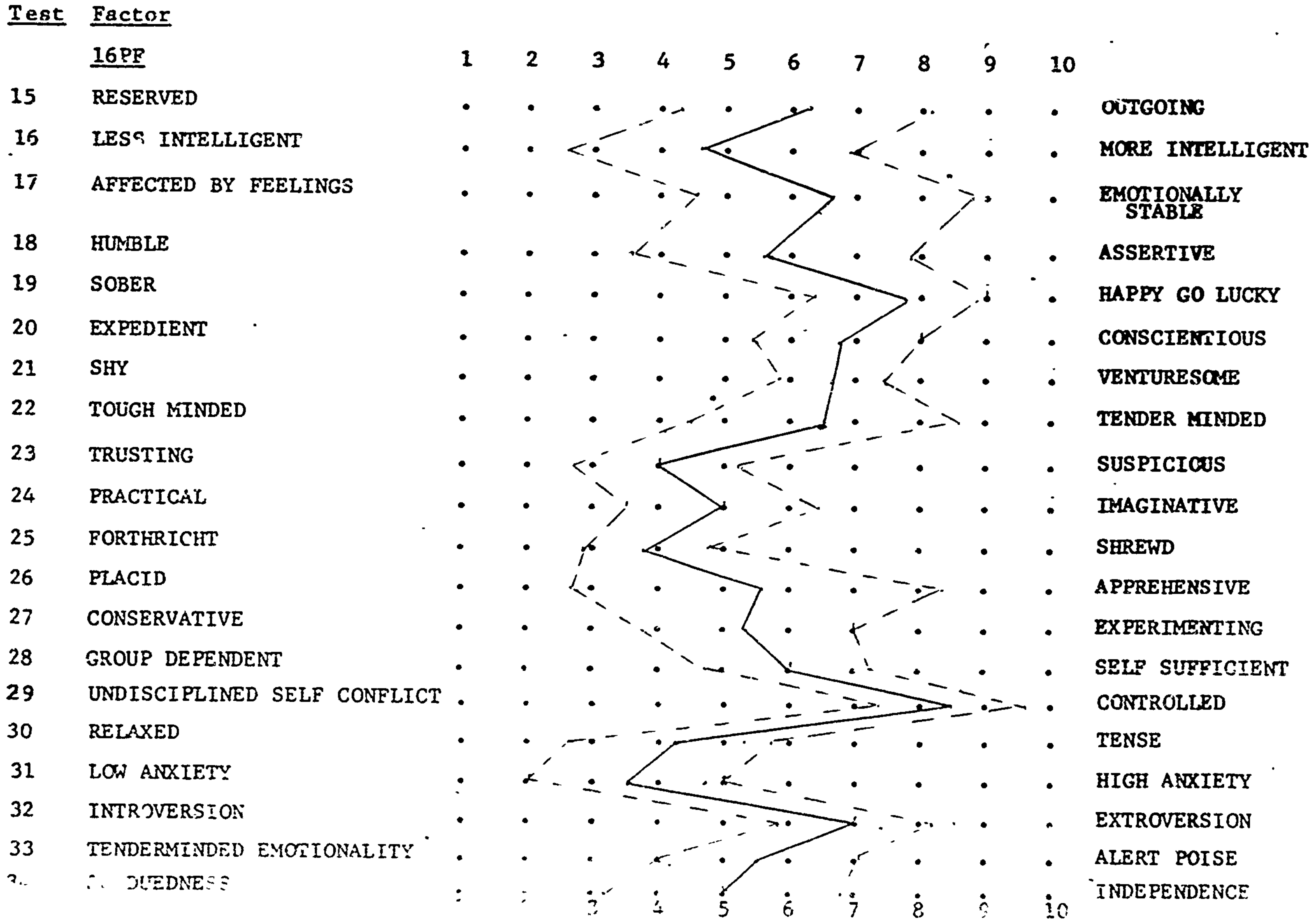

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
32 INTROVERSION
EXTROVERSION
33 TENDERMINDED EMOTIONALITY
ALERT POISE
34 SUBDUEDNESS
DEPENDENCE

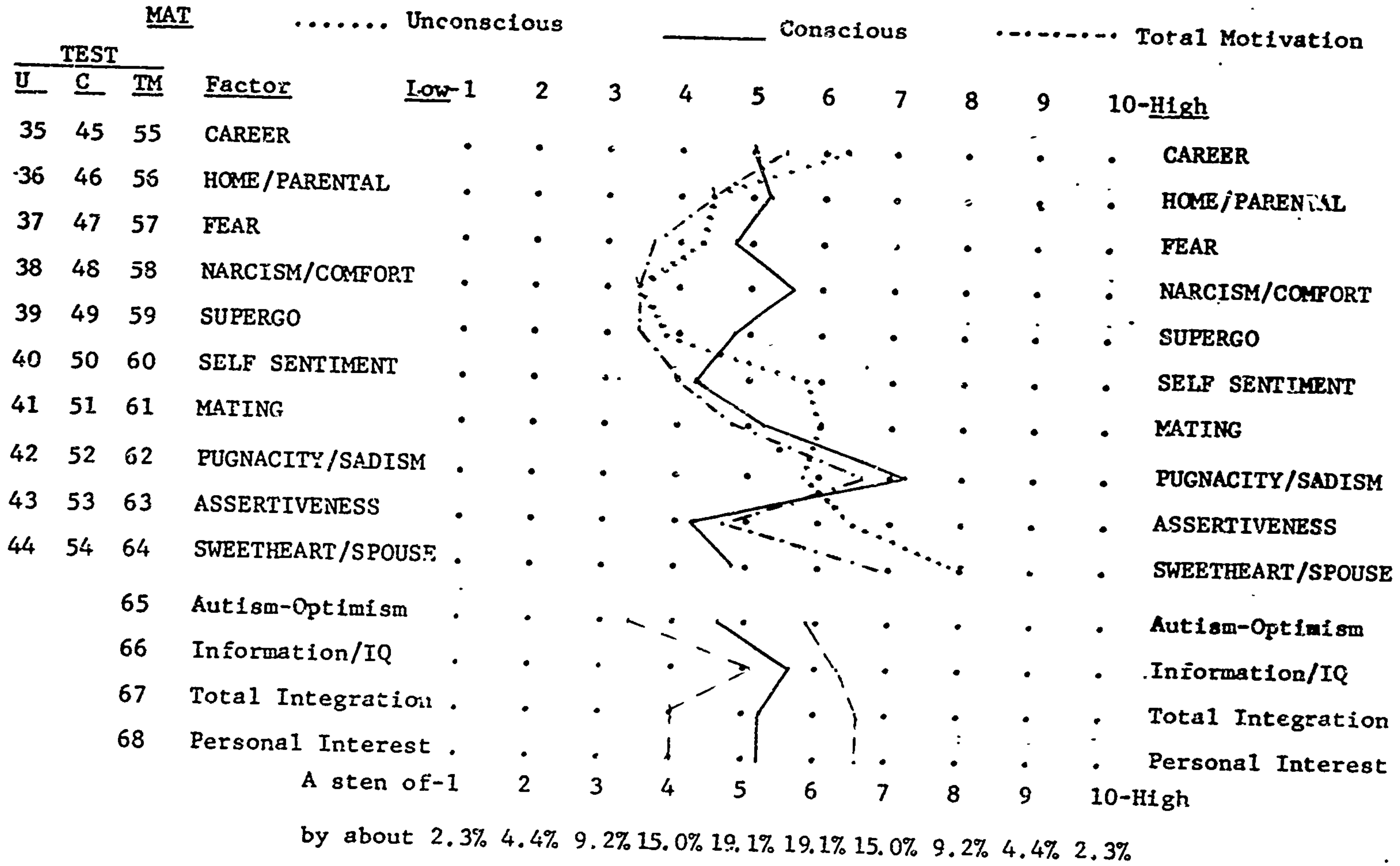


Note. The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores are in table for the "total motivation scores."

Appx. No. 10 G 1 Profile - Successful Guards

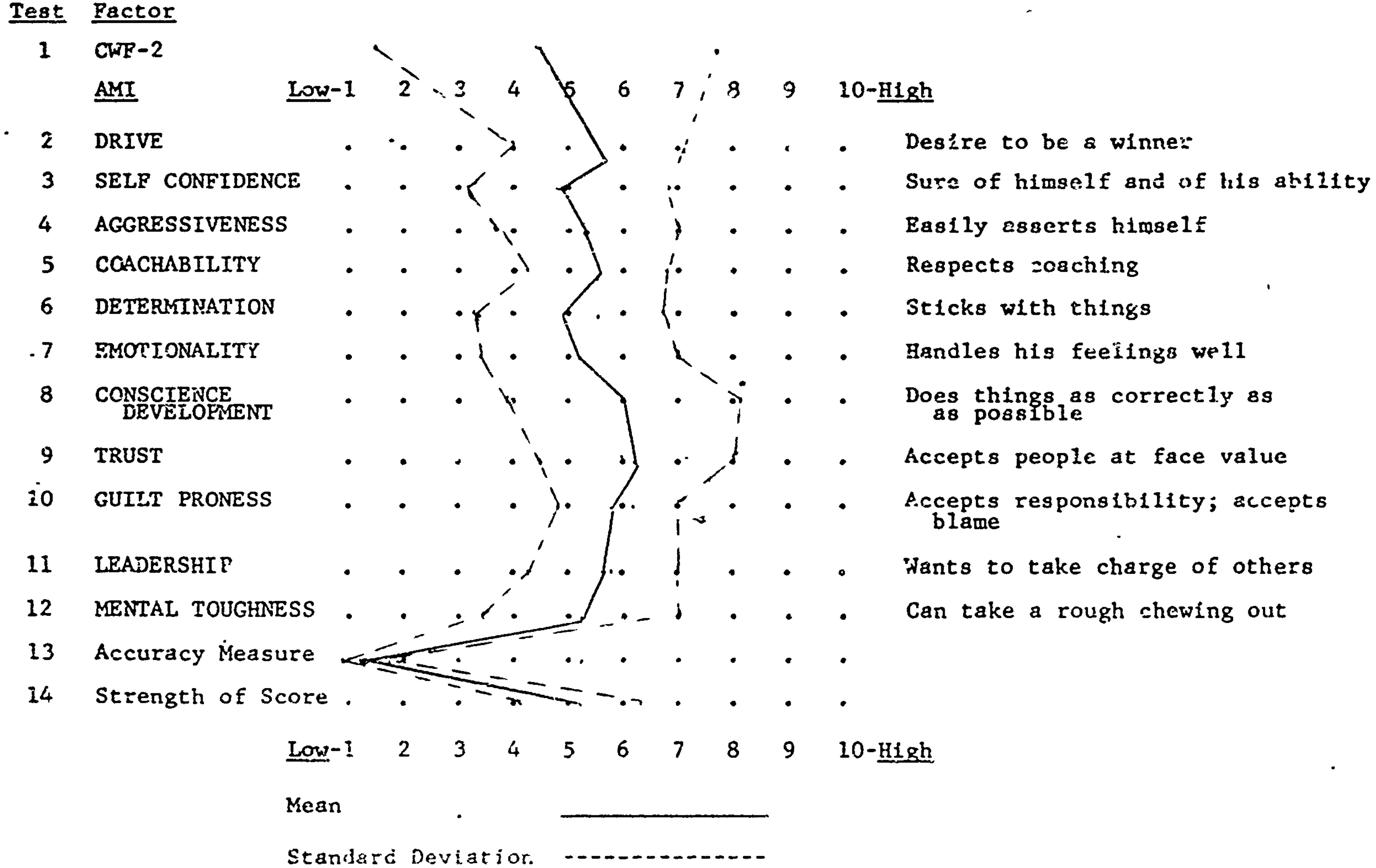


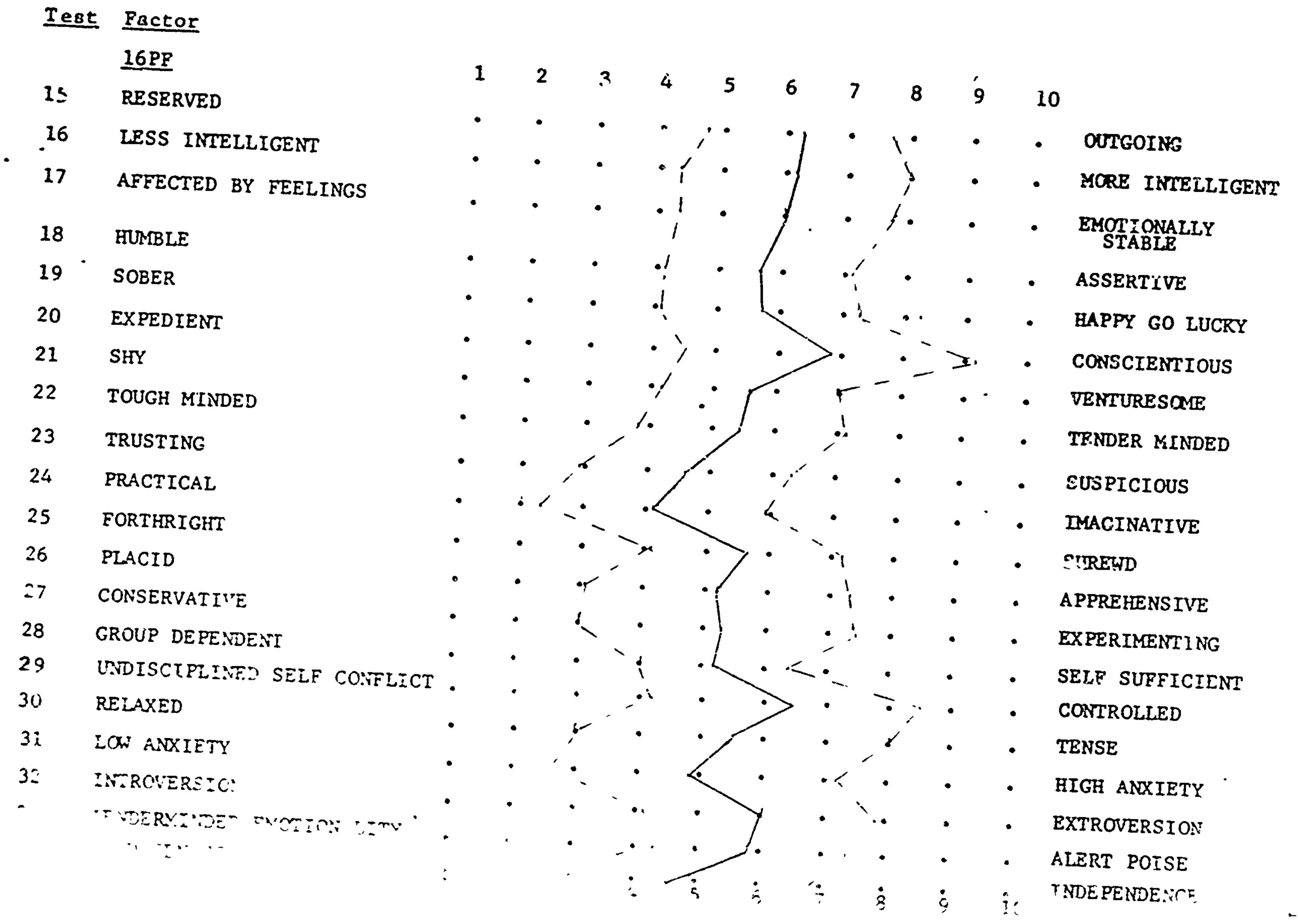

Test
Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED
16 LESS INTELLIGENT
17 AFFECTED BY FEELINGS
18 HUMBLE
19 SOBER
20 EXPEDIENT
21 SHY
22 TOUGH MINDED
23 TRUSTING
24 PRACTICAL
25 FORTHRIGHT
26 PLACID
27 CONSERVATIVE
28 GROUP DEPENDENT
29 UNDISCIPLINED SELF CONFLICT
30 RELAXED
31 LOW ANXIETY
32 INTROVERSION
33 TENDERMINDED EMOTIONALITY
34 SUBDUEDNESS
OUTGOING
MORE INTELLIGENT
EMOTIONALLY STABLE
ASSERTIVE
HAPPY GO LUCKY
CONSCIENTIOUS
VENTURESOME
TENDER MINDED
SUSPICIOUS
IMAGINATIVE
SHREWD
APPREHENSIVE
EXPERIMENTING
SELF SUFFICIENT
CONTROLLED
TENSE
HIGH ANXIETY
EXTROVERSION
ALERT POISE
INDEPENDENCE
3 4 5 6 7 8 9 10

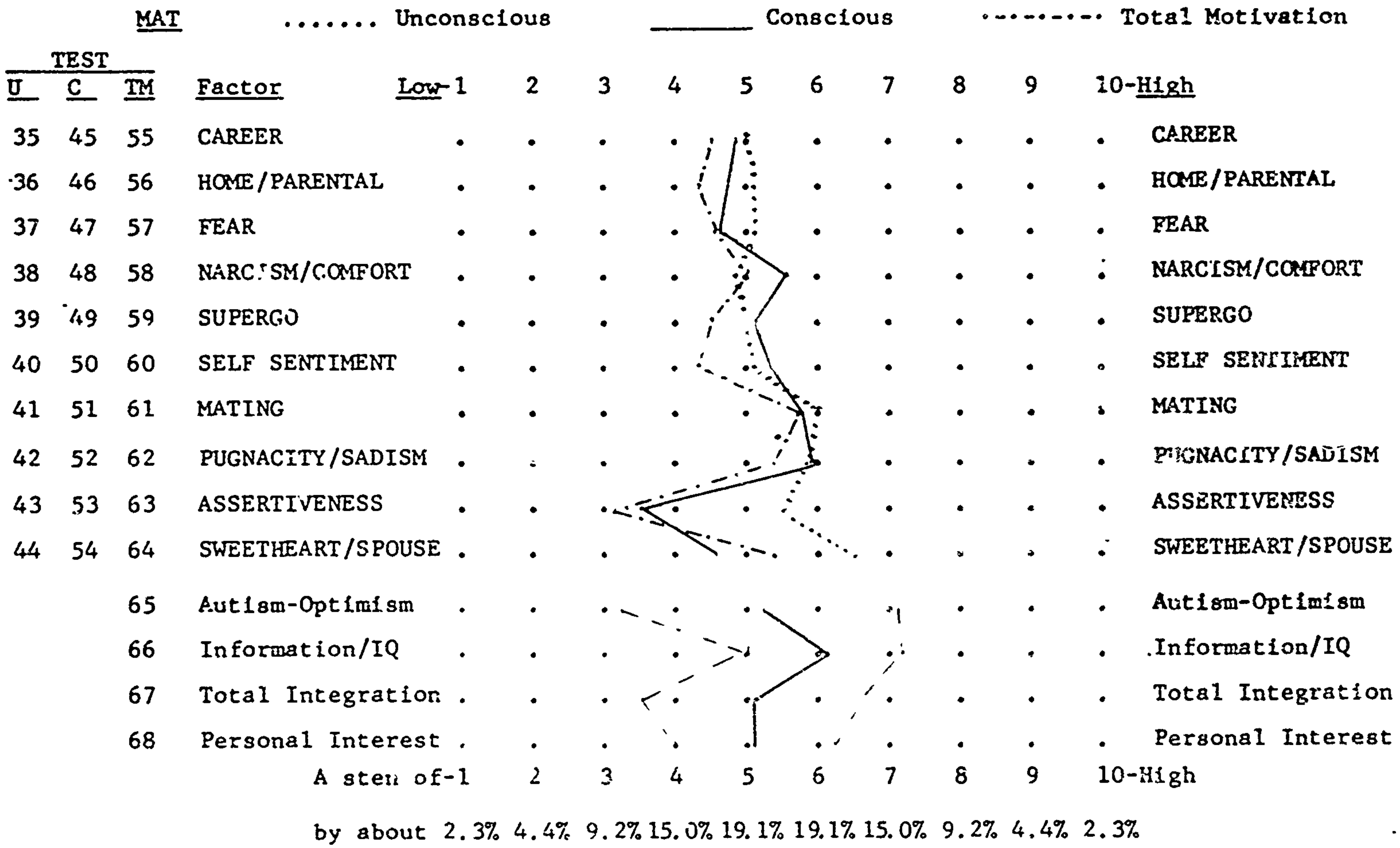


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" and table for the total motivation scores."

Appx. No. 11 G 9 Profile - Unsuccessful Guards

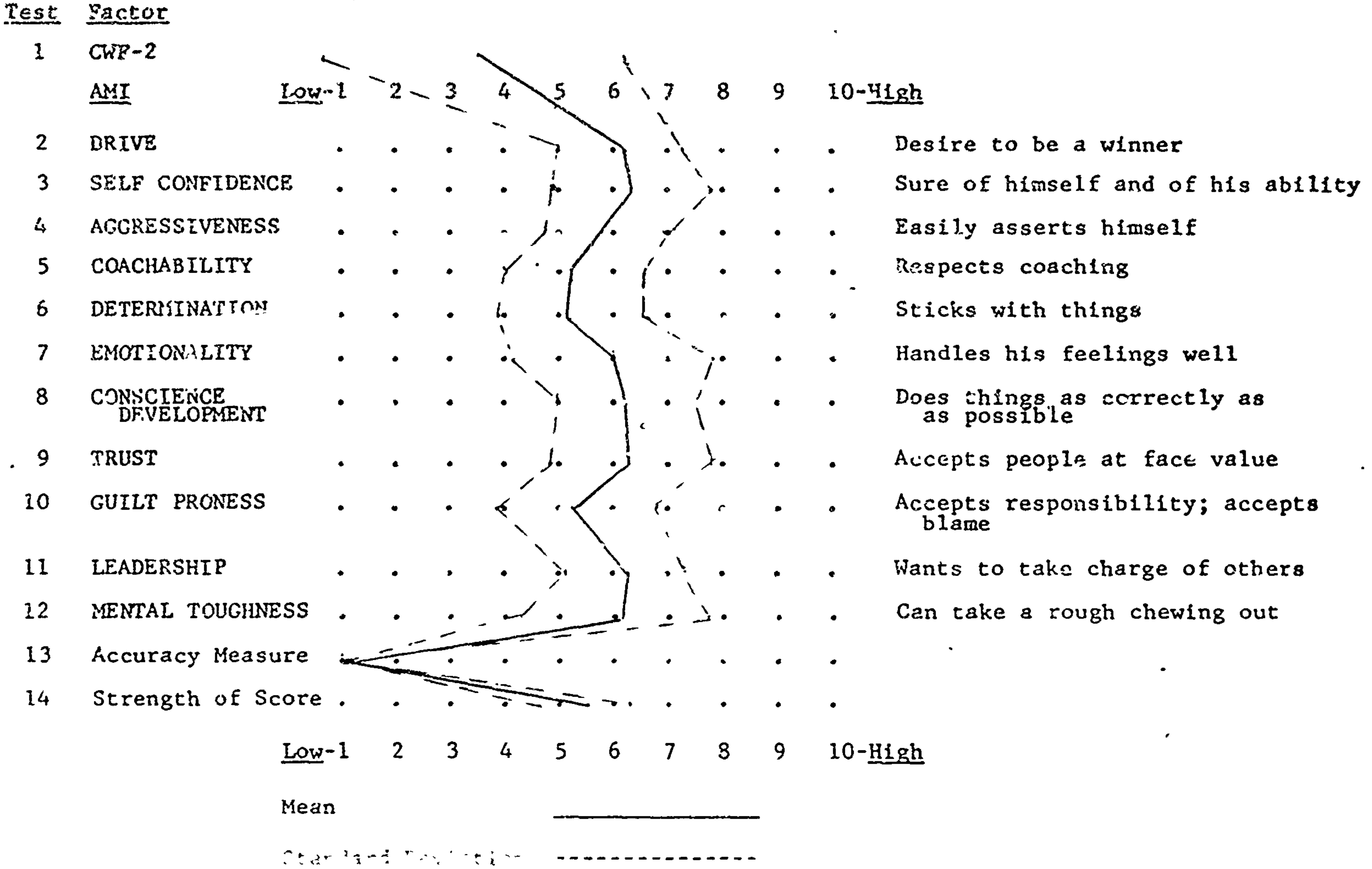



Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
16 LESS INTELLIGENT
17 AFFECTED BY FEELINGS
18 HUMBLE
19 SOBER
20 EXPEDIENT
21 SHY
22 TOUGH MINDED
23 TRUSTING
24 PRACTICAL
25 FORTHRIGHT
26 PLACID
27 CONSERVATIVE
28 GROUP DEPENDENT
29 UNDISCIPLINED SELF CONFLICT
30 RELAXED
31 LOW ANXIETY
32 INTROVERSION
TENDERMINDED EMOTIONALITY
OUTGOING
MORE INTELLIGENT
EMOTIONALLY STABLE
ASSERTIVE
HAPPY GO LUCKY
CONSCIENTIOUS
VENTURESOME
TENDER MINDED
SUSPICIOUS
IMAGINATIVE
SHREWD
APPREHENSIVE
EXPERIMENTING
SELF SUFFICIENT
CONTROLLED
TENSE
HIGH ANXIETY
EXTROVERSION
ALERT POISE
INDEPENDENCE



Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores and in table for the total motivation scores."

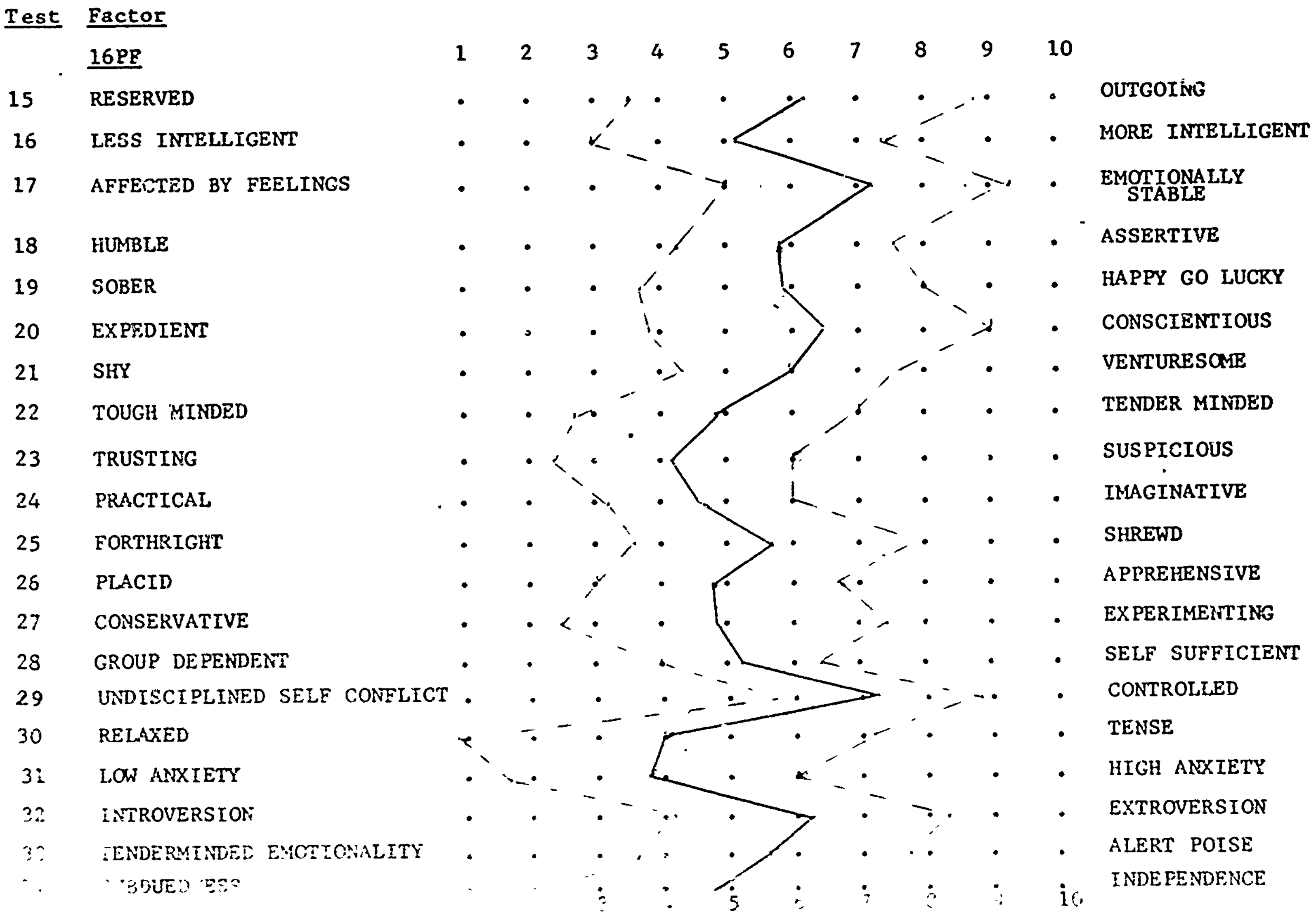
Appx. No. 12 T 1 ________ Profile - Successful Tackles

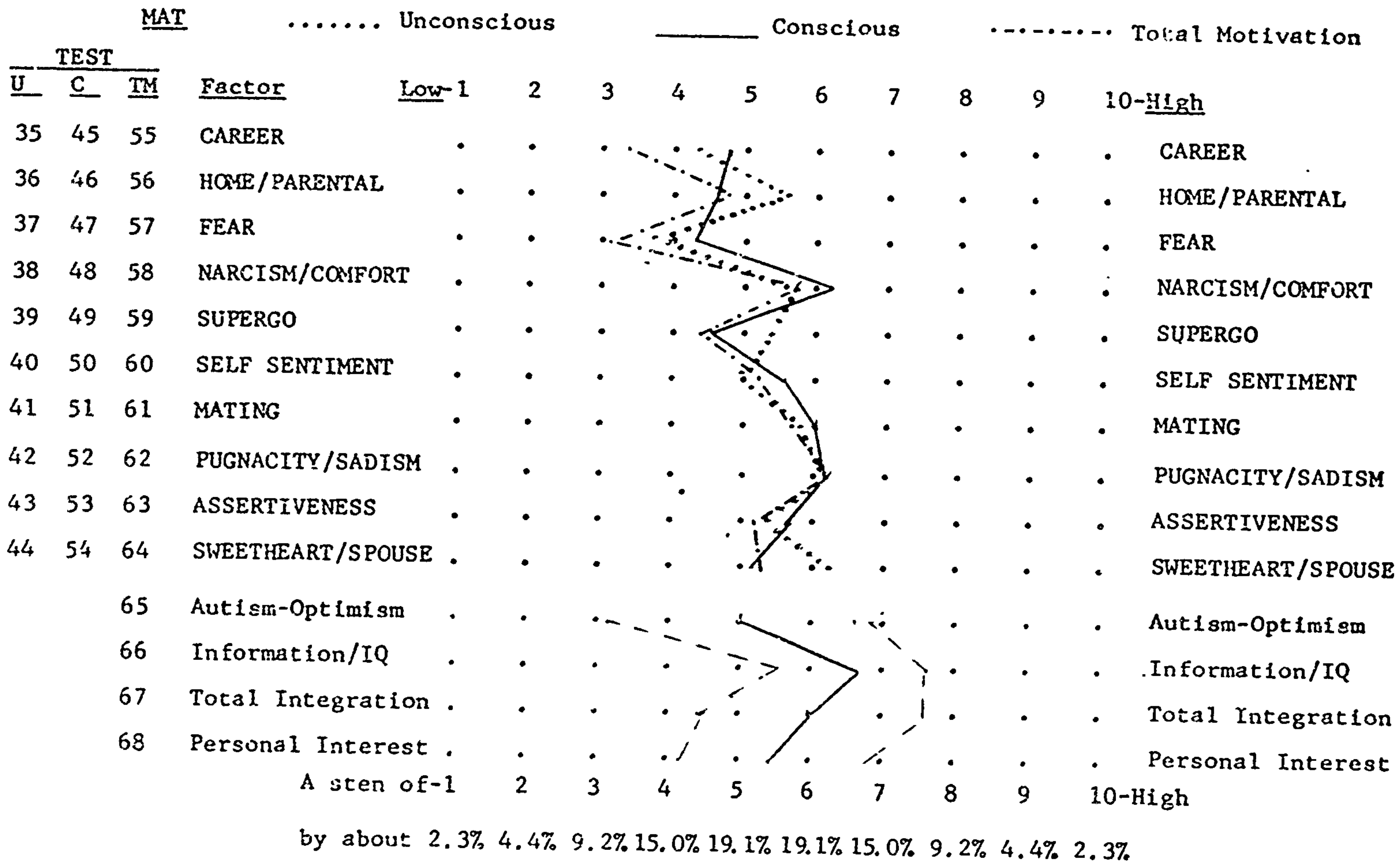


Test	Factor		
1	CWP-2		
	AMI	Low-1 2 3 4 5 6 7 8 9 10-High	
2	DRIVE		Desire to be a winner
3	SELF CONFIDENCE		Sure of himself and of his ability
4	AGGRESSIVENESS		Easily asserts himself
5	COACHABILITY		Respects coaching
6	DETERMINATION		Sticks with things
7	EMOTIONALITY		Handles his feelings well
8	CONSCIENCE DEVELOPMENT		Does things as correctly as as possible
9	TRUST		Accepts people at face value
10	GUILT PRONESS		Accepts responsibility; accepts blame
11	LEADERSHIP		Wants to take charge of others
12	MENTAL TOUGHNESS		Can take a rough chewing out
13	Accuracy Measure		
14	Strength of Score		
		Low-1 2 3 4 5 6 7 8 9 10-High	

Mean ________________

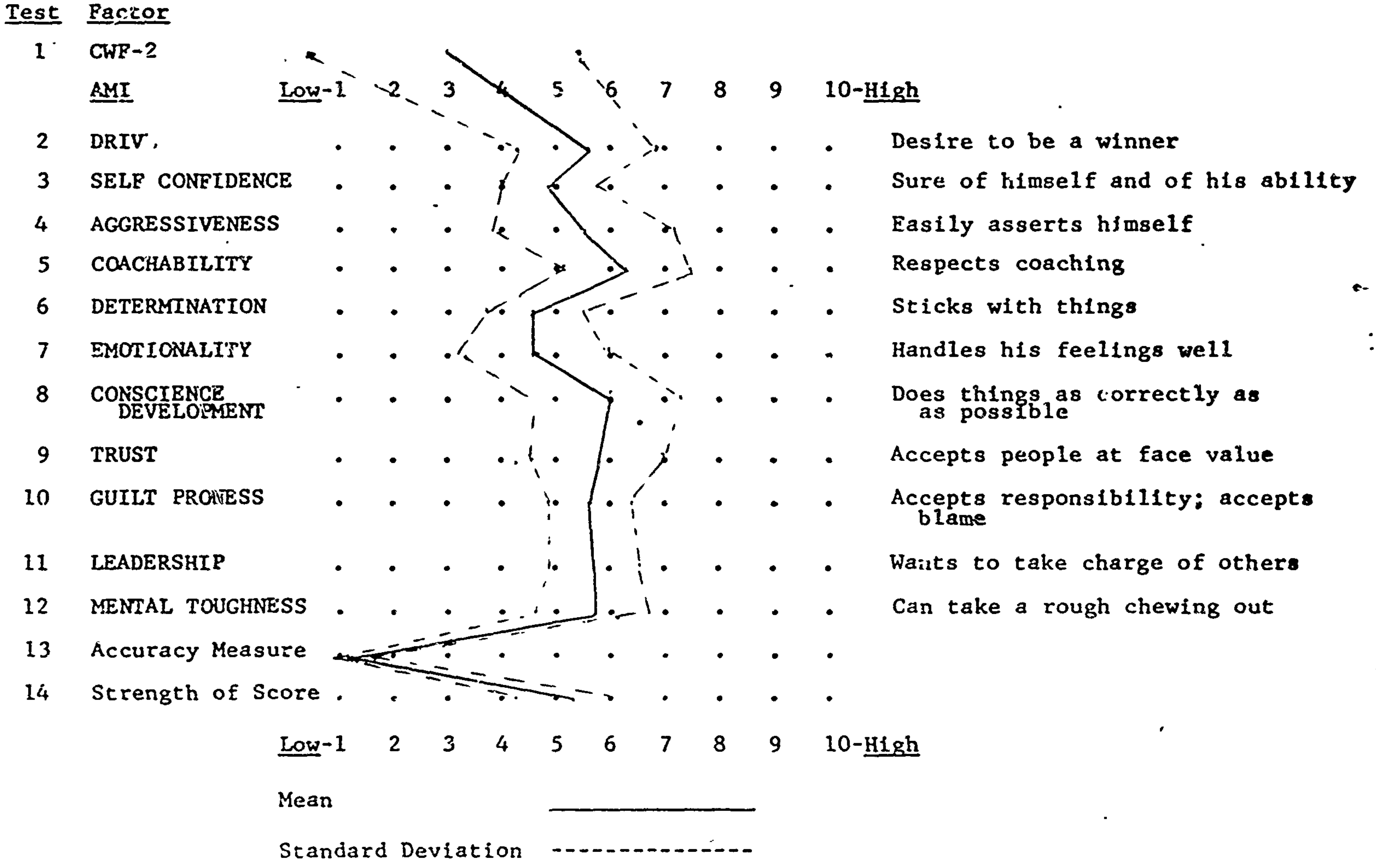
Standard Deviation - - - - - - - - - - - - - - -

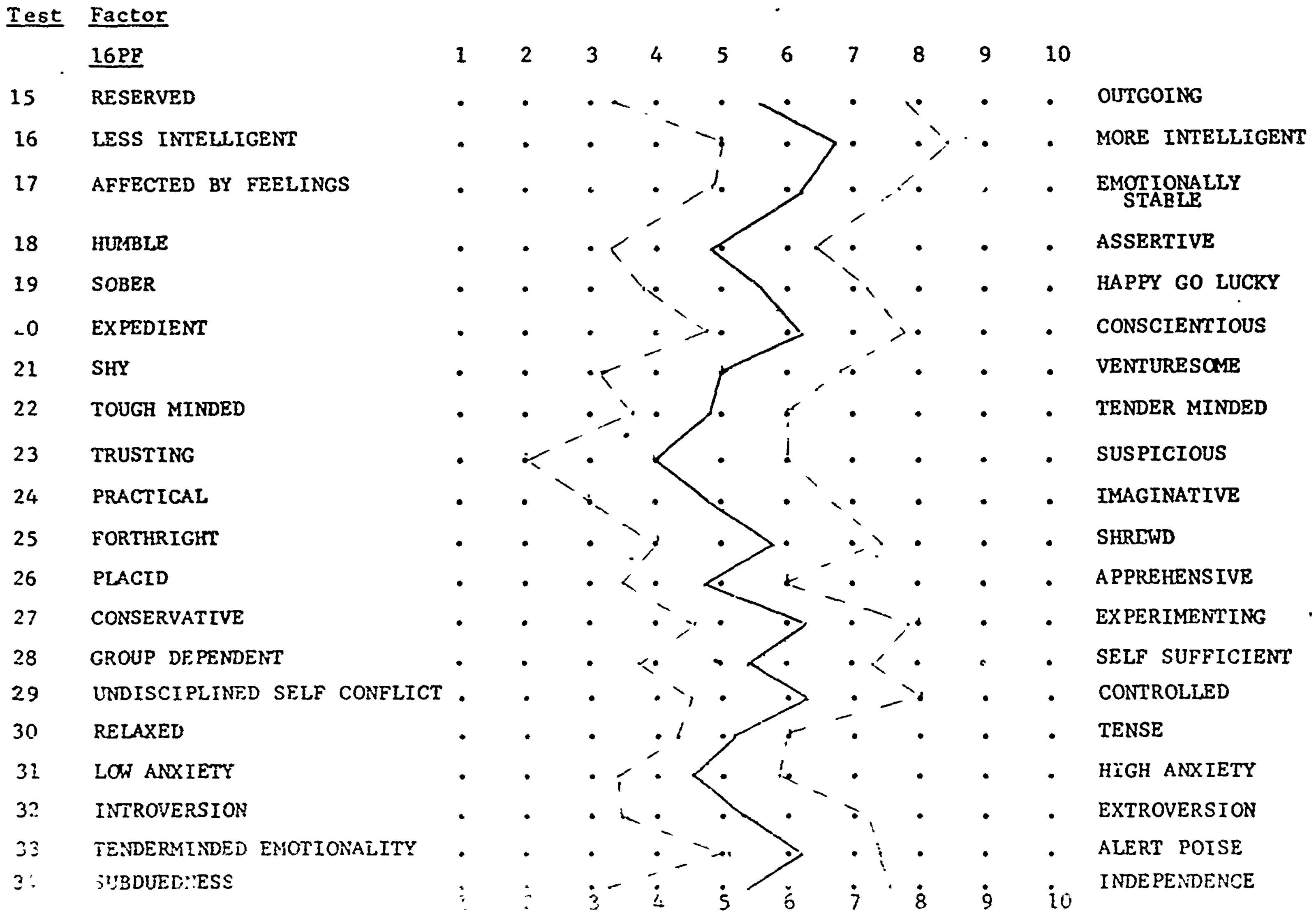
Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UNDISCIPLINED SELF CONFLICT
CONTROLLED
30
RELAXED
TENSE
31
LOW ANXIETY
HIGH ANXIETY
32
INTROVERSION
EXTROVERSION
33
TENDERMINDED EMOTIONALITY
ALERT POISE
SUBDUEDNESS
INDEPENDENCE
5
10

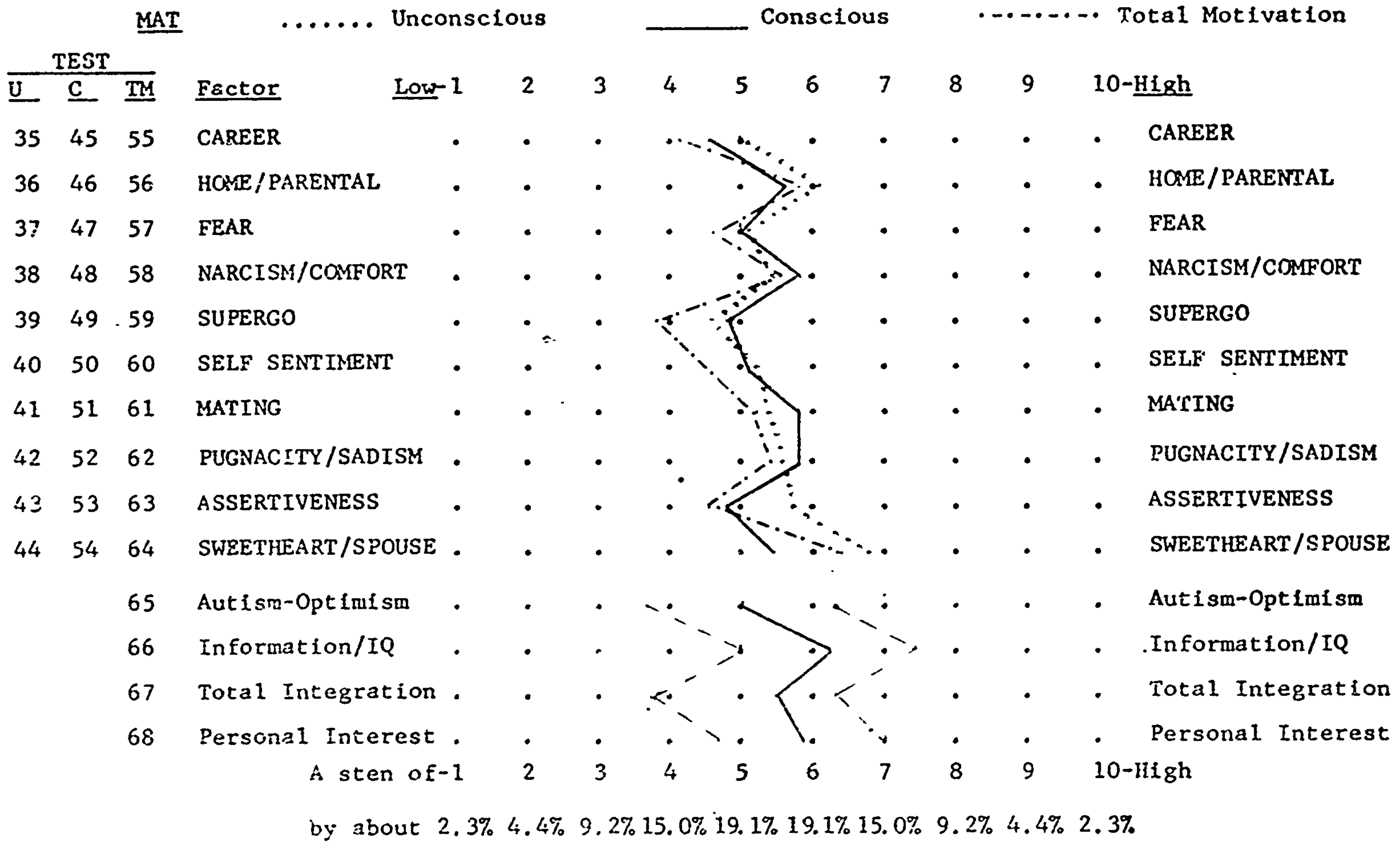


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appx. No. 13 T 9 Profile - Unsuccessful Tackles



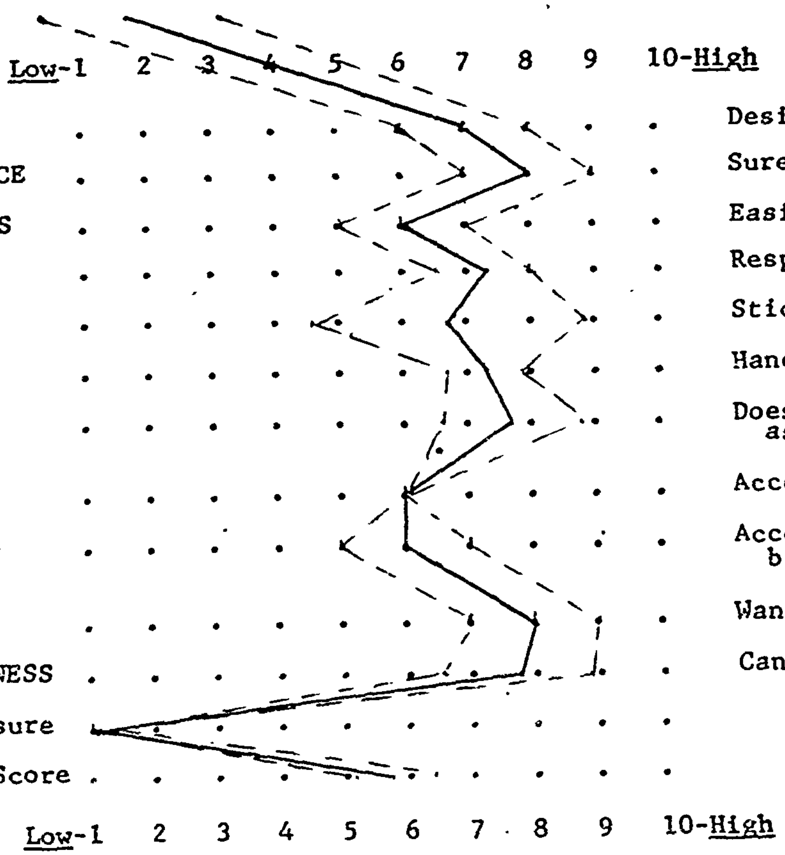

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
32 INTROVERSION
EXTROVERSION
33 TENDERMINDED EMOTIONALITY
ALERT POISE
34 SUBDUEDNESS
INDEPENDENCE
1
2
3
4
5
6
7
8
9
10



Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" [illegible] total motivation scores."

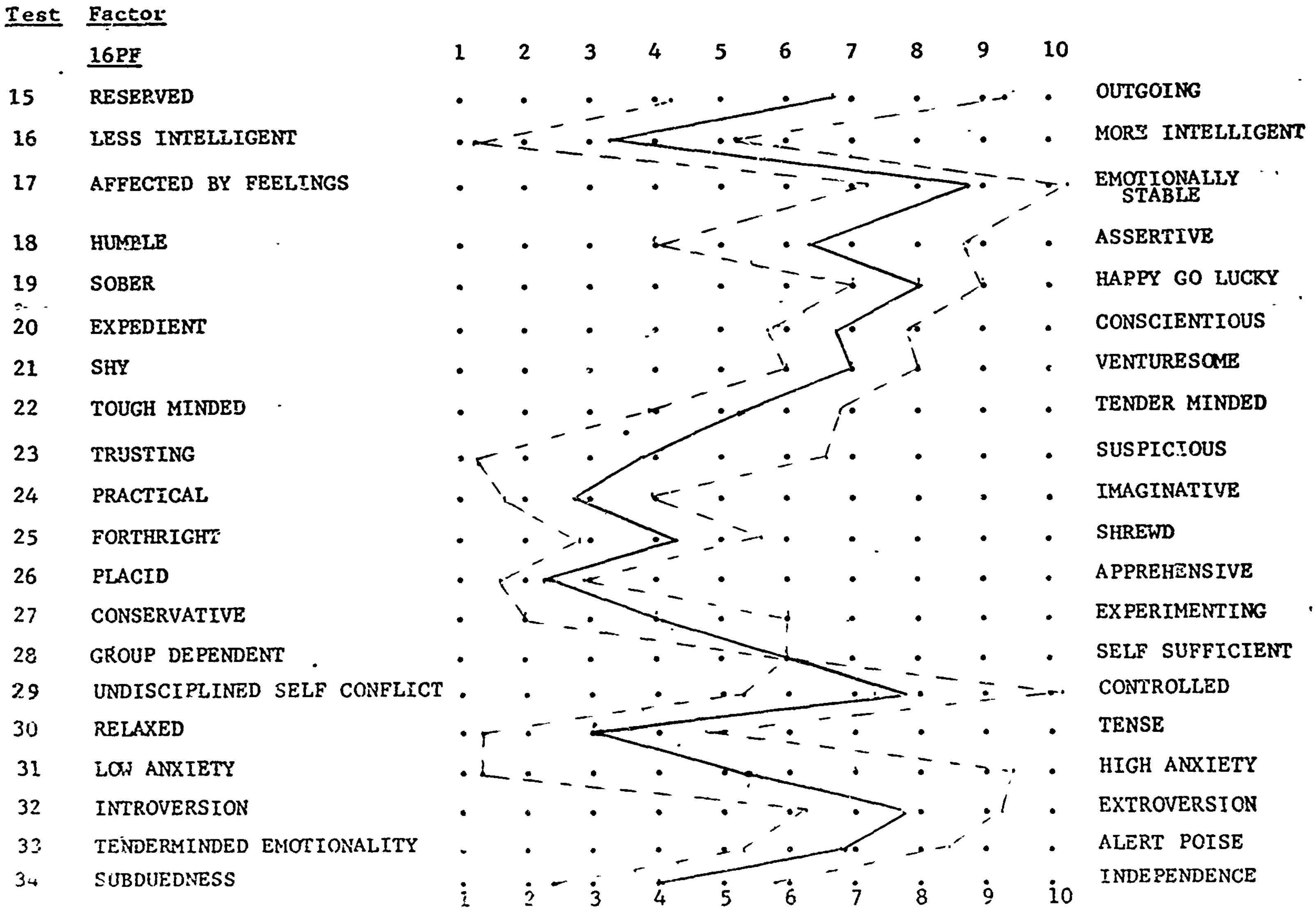
Appx. No. 14 TE 1 Profile - Successful Tight Ends

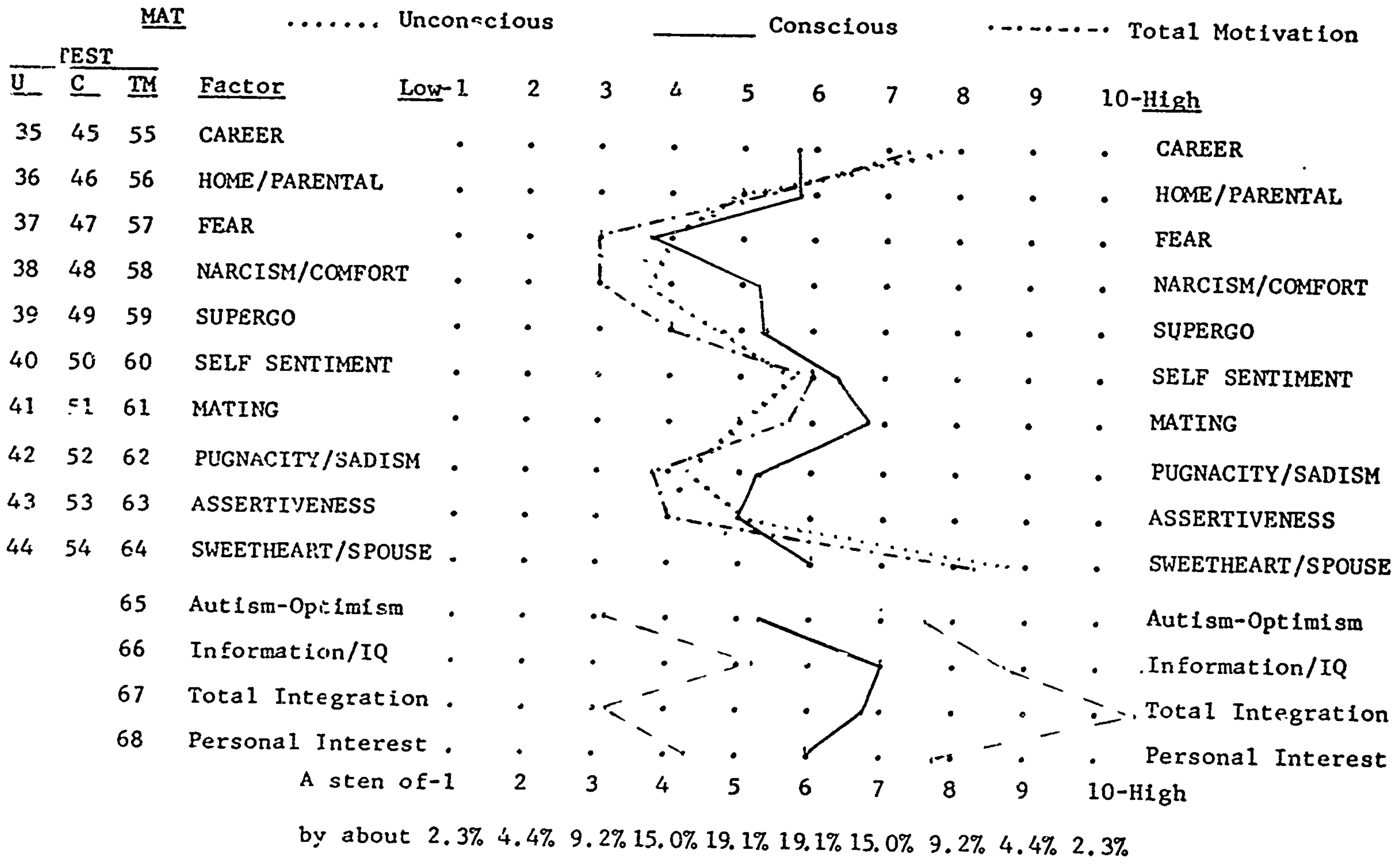
Test	Factor	
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13.	Accuracy Measure	
14	Strength of Score	



Mean ————————

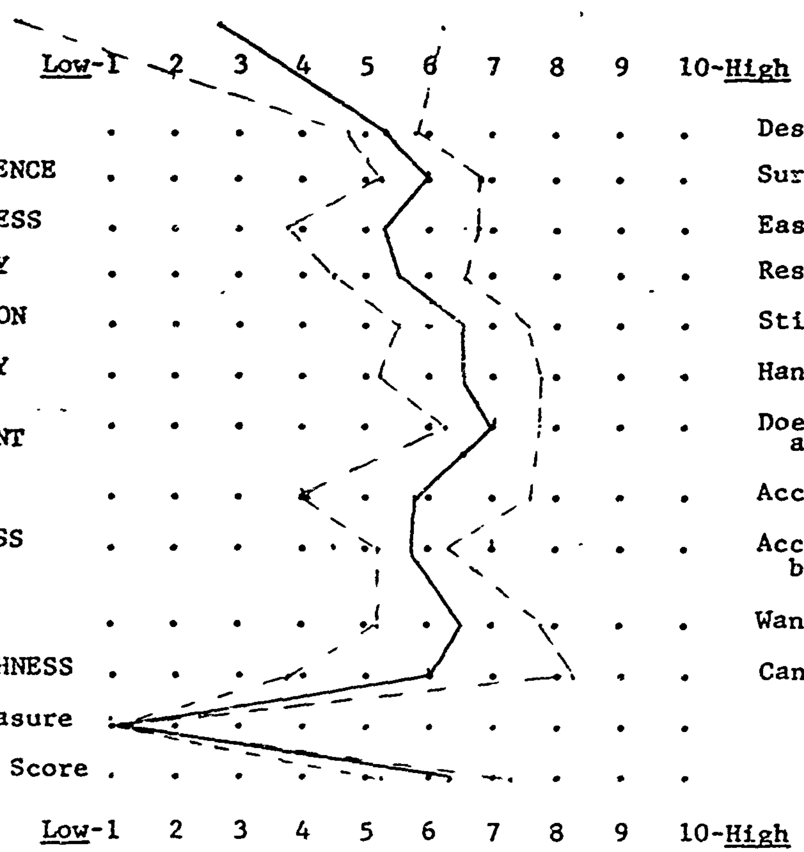
Standard Deviation - - - - - - - - - - - - - -


Test
Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED — OUTGOING
16 LESS INTELLIGENT — MORE INTELLIGENT
17 AFFECTED BY FEELINGS — EMOTIONALLY STABLE
18 HUMBLE — ASSERTIVE
19 SOBER — HAPPY GO LUCKY
20 EXPEDIENT — CONSCIENTIOUS
21 SHY — VENTURESOME
22 TOUGH MINDED — TENDER MINDED
23 TRUSTING — SUSPICIOUS
24 PRACTICAL — IMAGINATIVE
25 FORTHRIGHT — SHREWD
26 PLACID — APPREHENSIVE
27 CONSERVATIVE — EXPERIMENTING
28 GROUP DEPENDENT — SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT — CONTROLLED
30 RELAXED — TENSE
31 LOW ANXIETY — HIGH ANXIETY
32 INTROVERSION — EXTROVERSION
33 TENDERMINDED EMOTIONALITY — ALERT POISE
34 SUBDUEDNESS — INDEPENDENCE
1 2 3 4 5 6 7 8 9 10



Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

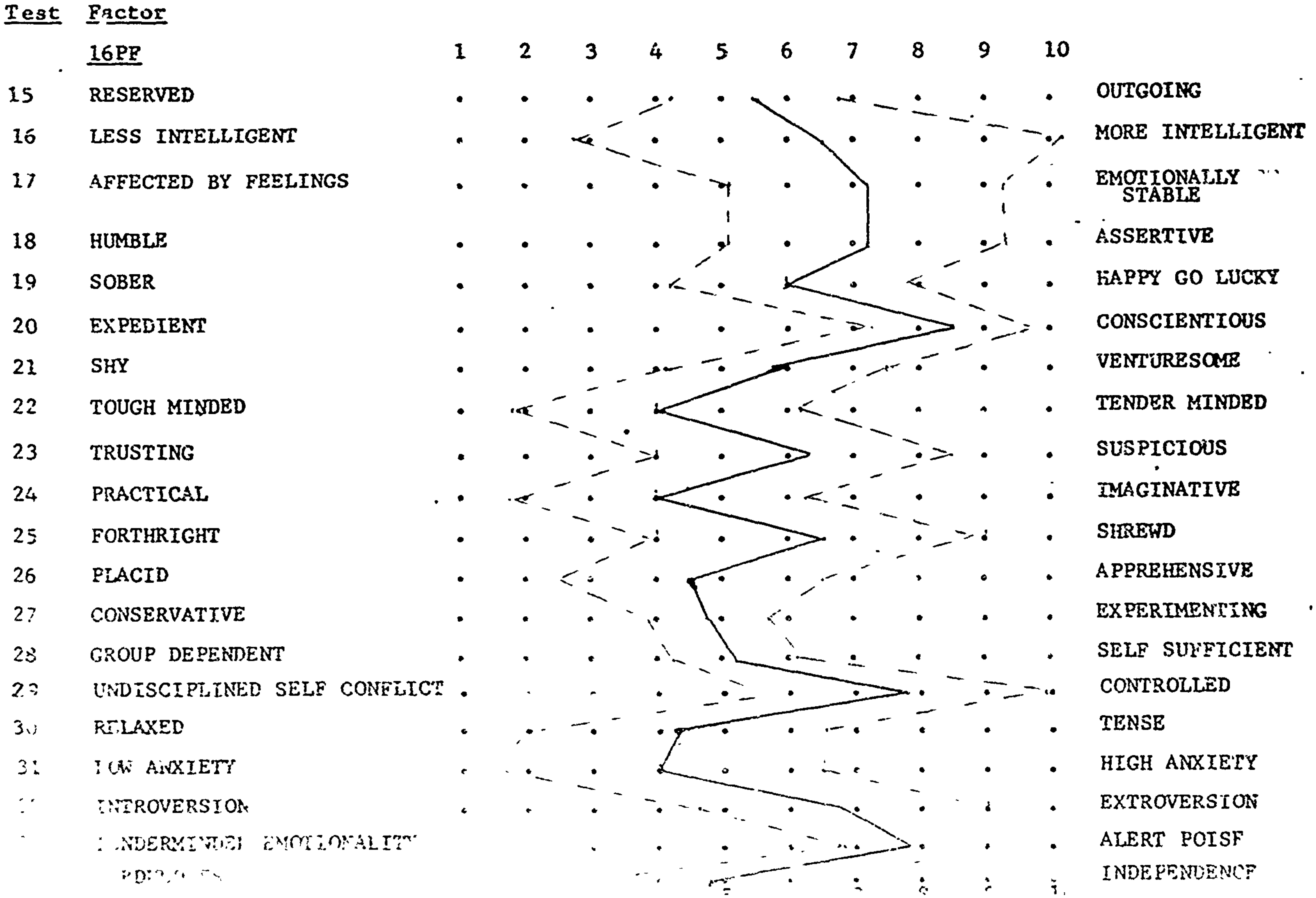
Appx. No. 15 TE 9 Profile -- Unsuccessful Tight Ends

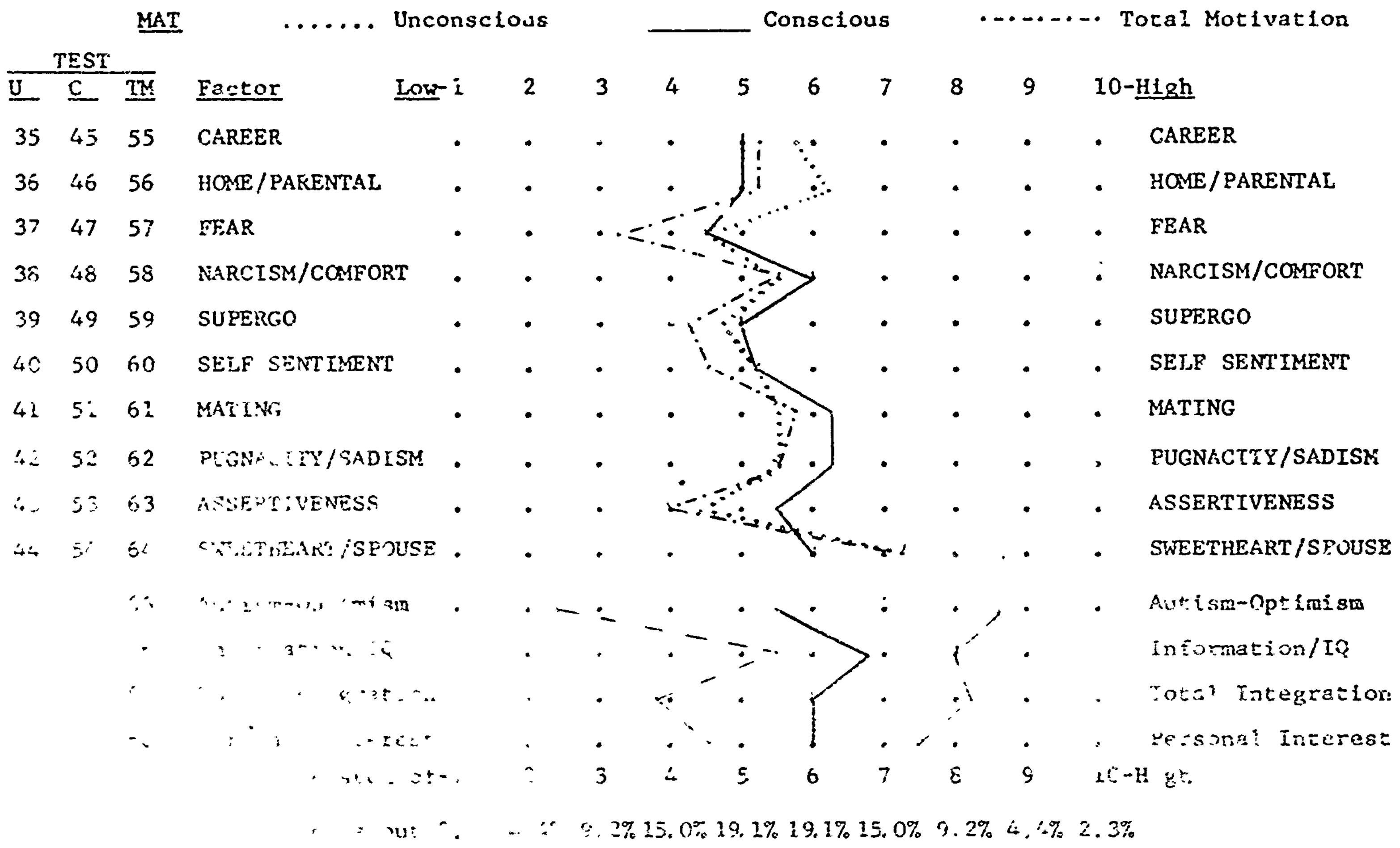


Test	Factor	Description
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13	Accuracy Measure	
14	Strength of Score	

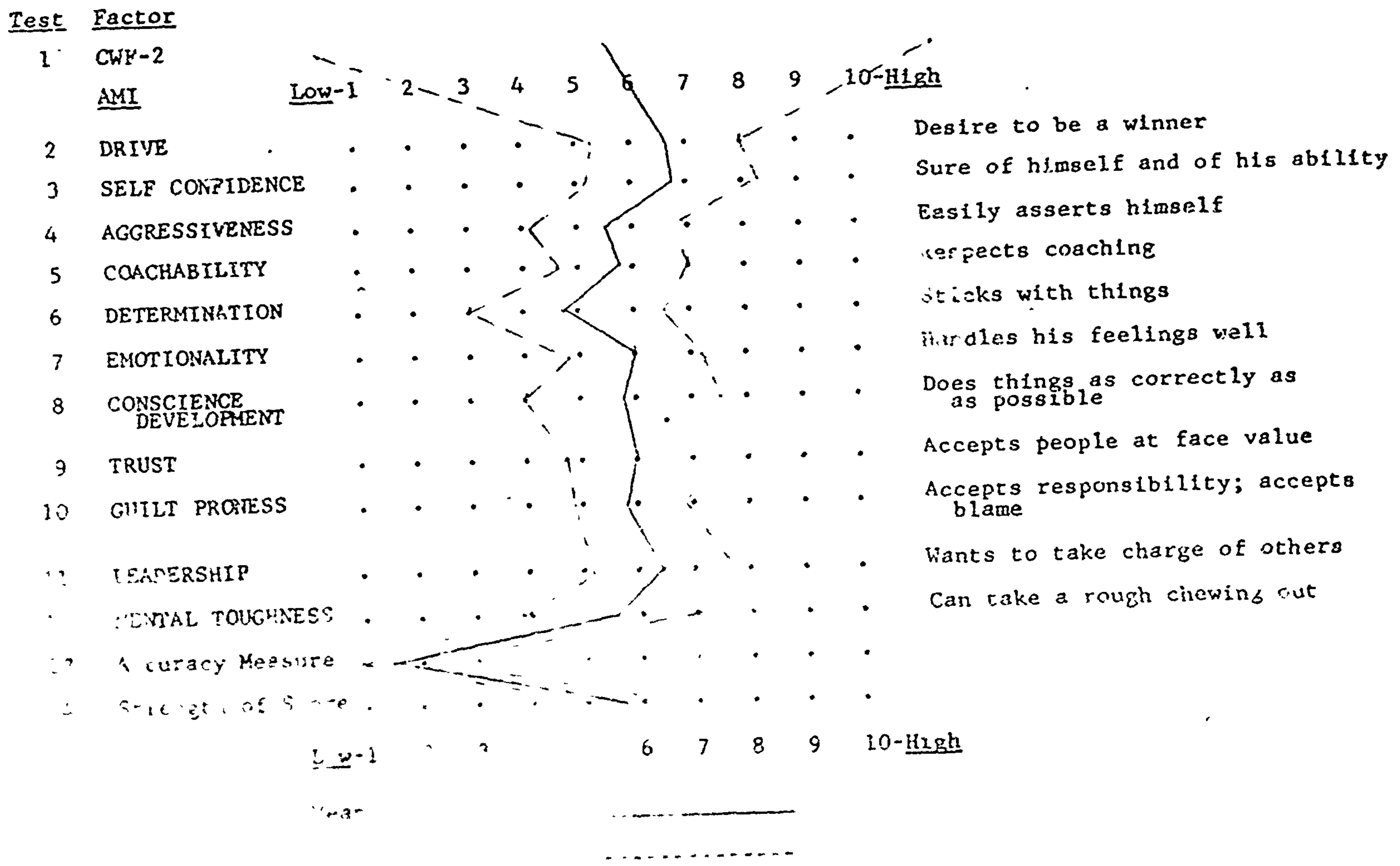
Mean ________________

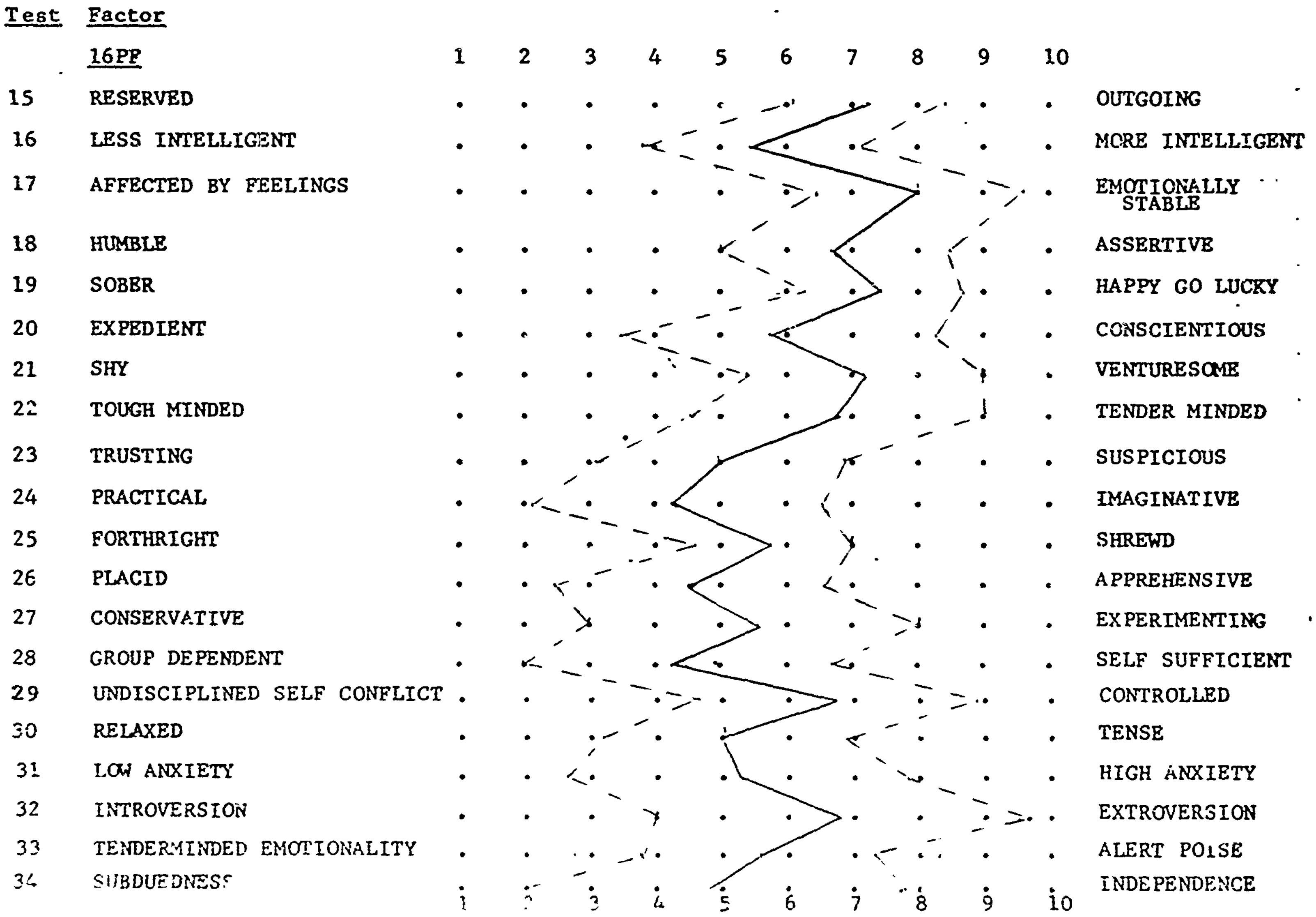
Standard Deviation ---------------

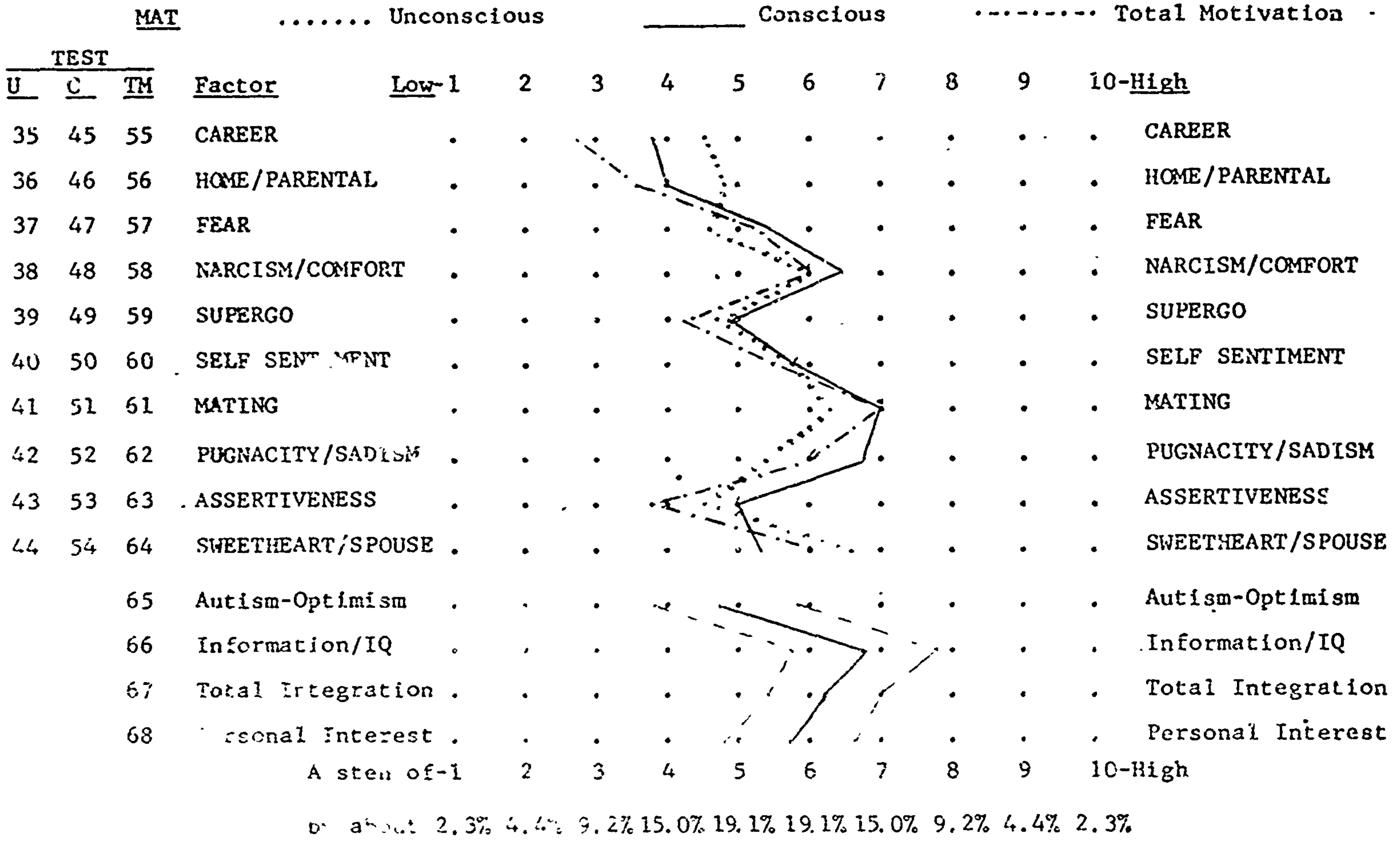

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
INTROVERSION
EXTROVERSION
UNDERMINDED EMOTIONALITY
ALERT POISE
INDEPENDENCE


MAT
.... Unconscious
Conscious
-------- Total Motivation
TEST
U
C
TM
Factor
Low-1
2
3
4
5
6
7
8
9
10-High
35 45 55 CAREER
36 46 56 HOME/PARENTAL
37 47 57 FEAR
38 48 58 NARCISM/COMFORT
39 49 59 SUPERGO
40 50 60 SELF SENTIMENT
41 51 61 MATING
42 52 62 PUGNACITY/SADISM
43 53 63 ASSERTIVENESS
44 54 64 SWEETHEART/SPOUSE
CAREER
HOME/PARENTAL
FEAR
NARCISM/COMFORT
SUPERGO
SELF SENTIMENT
MATING
PUGNACTTY/SADISM
ASSERTIVENESS
SWEETHEART/SPOUSE
Autism-Optimism
Information/IQ
Total Integration
Personal Interest
3
4
5
6
7
8
9
10-High
9.2% 15.0% 19.1% 19.1% 15.0% 9.2% 4.4% 2.3%

Appx. No. 16 RB 1 Profile - Successful Running Backs

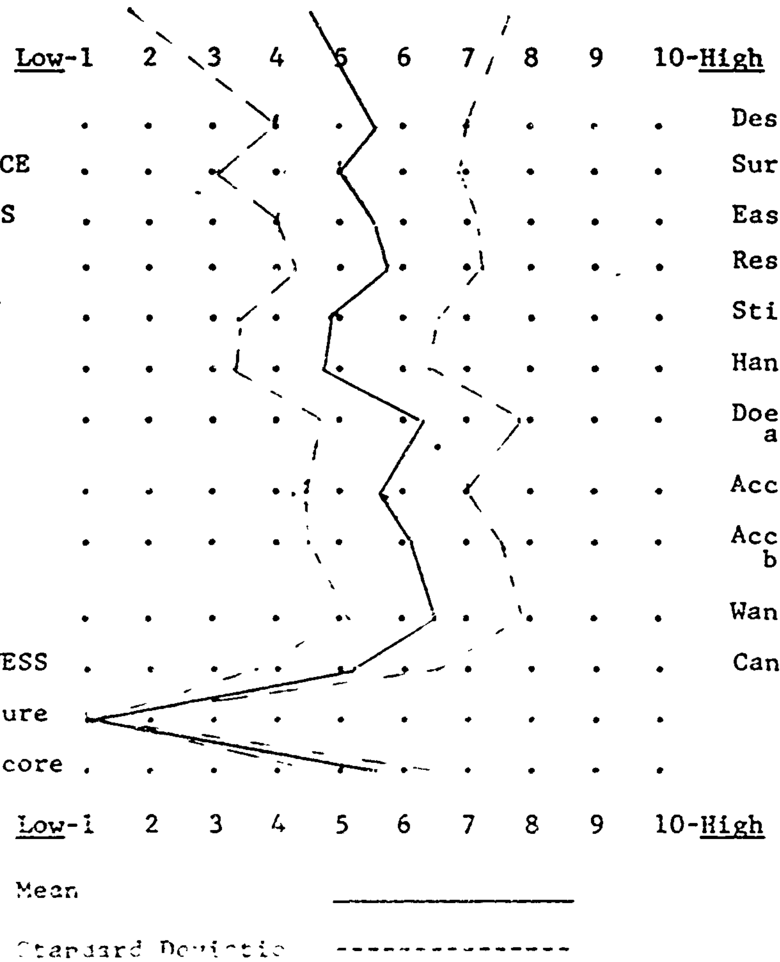



Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
32 INTROVERSION
EXTROVERSION
33 TENDERMINDED EMOTIONALITY
ALERT POISE
34 SUBDUEDNESS
INDEPENDENCE
1
2
3
4
5
6
7
8
9
10

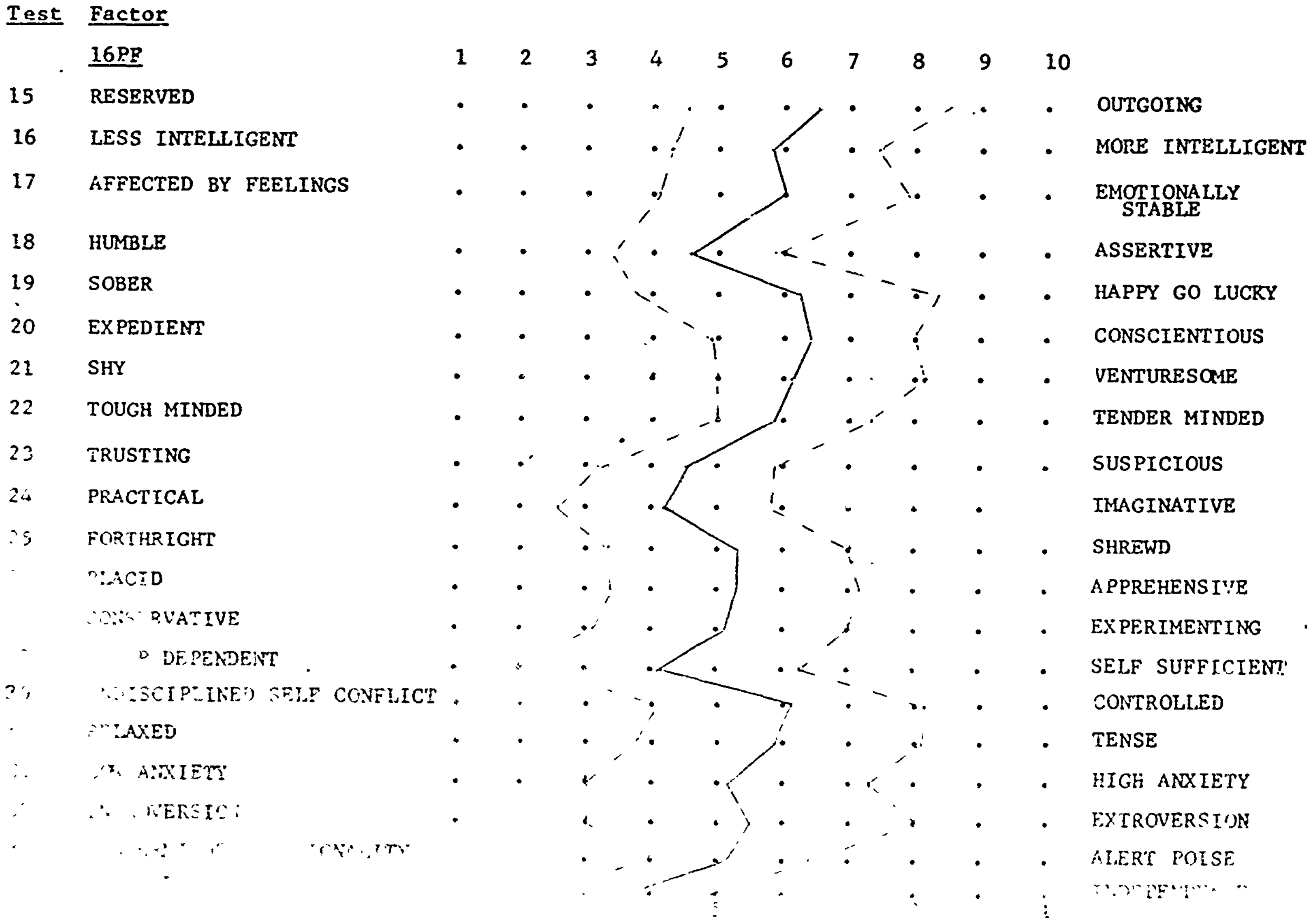


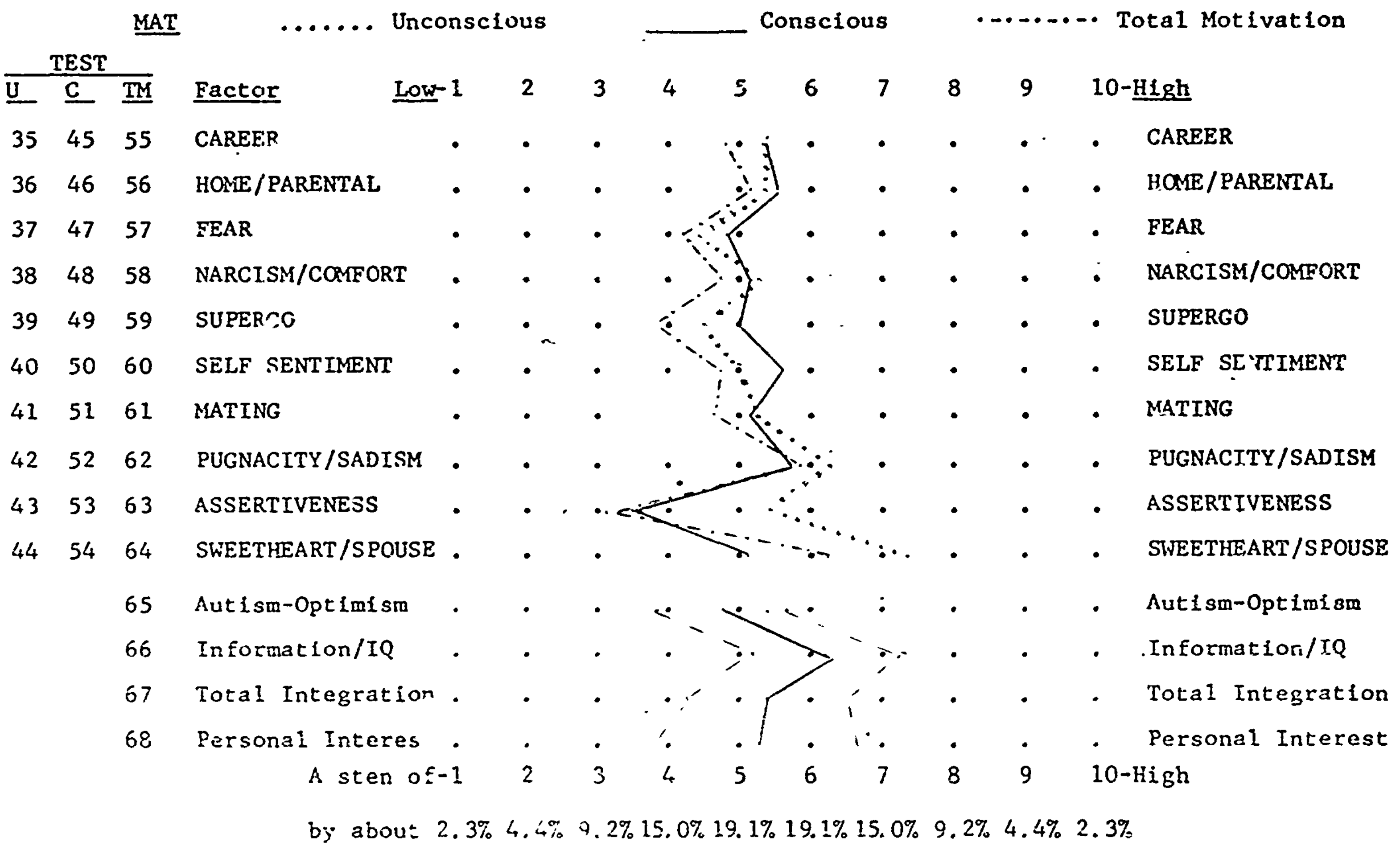
[illegible] The above profile represents [illegible] scores with standard deviation scores for the MAT [illegible] in [illegible] the "unconscious" scores; in table for the "conscious" [illegible] total motivation scores."

Appx. No. 17 RB 9 Profile - Unsuccessful Running Backs



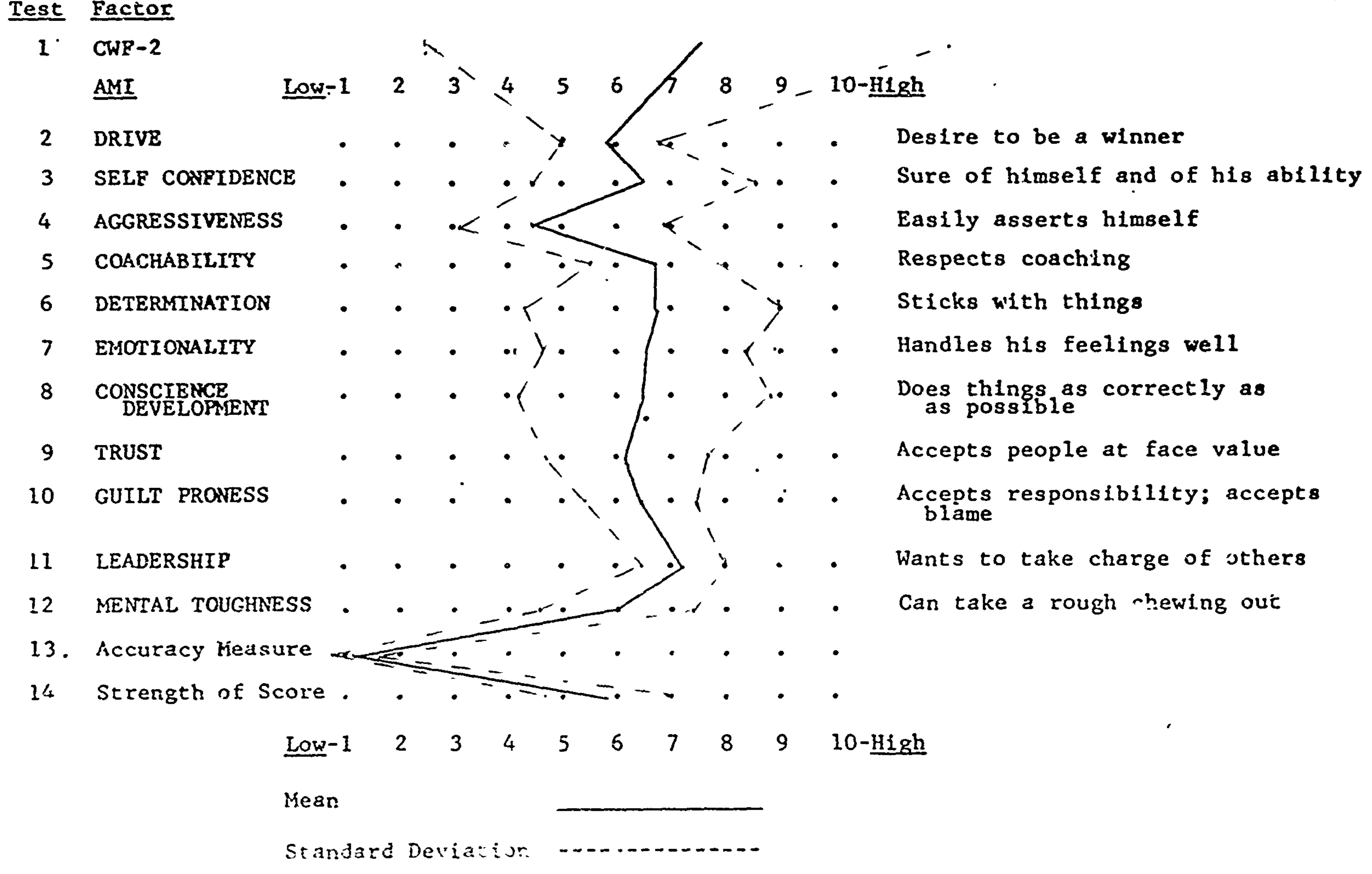
Test	Factor	Description
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13	Accuracy Measure	
14	Strength of Score	


Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
FORTHRIGHT
SHREWD
LACID
APPREHENSIVE
RVATIVE
EXPERIMENTING
DEPENDENT
SELF SUFFICIENT
ISCIPLINED SELF CONFLICT
CONTROLLED
LAXED
TENSE
ANXIETY
HIGH ANXIETY
VERSIO
EXTROVERSION
ALERT POISE

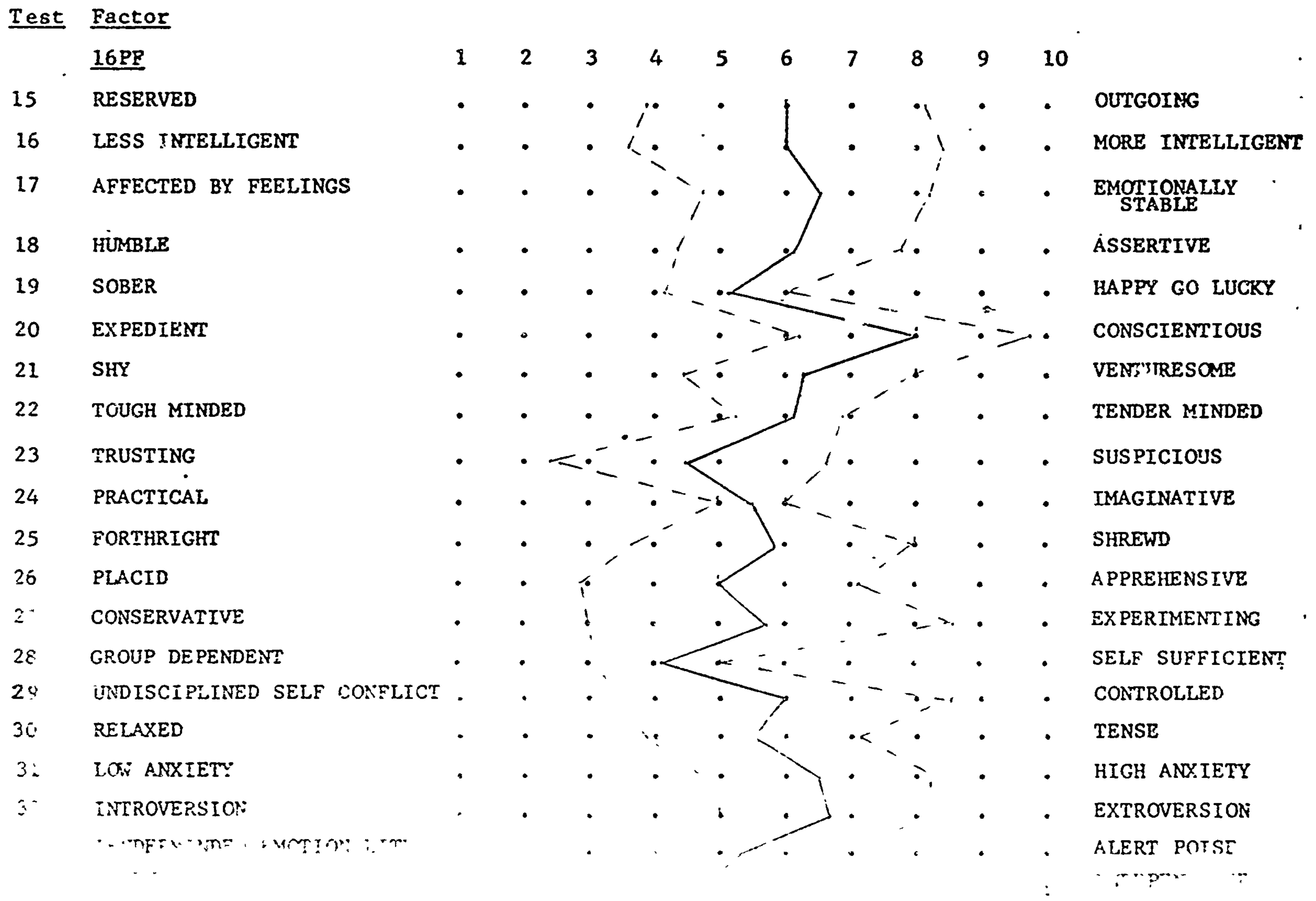


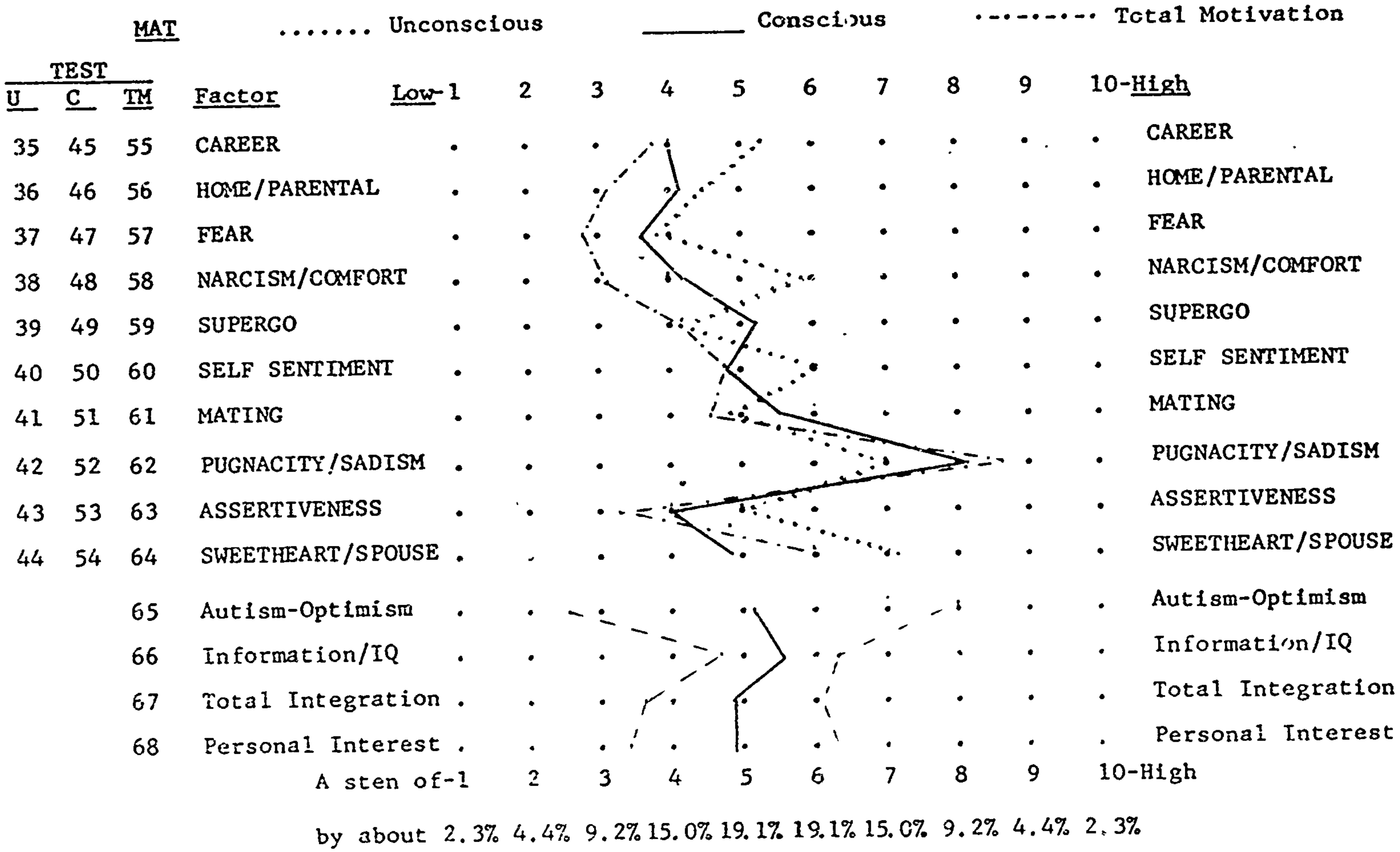
Note. The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores and in table for the "total motivation scores."

Appx. No. 18 WR 1 Profile - Successful Wide Receivers



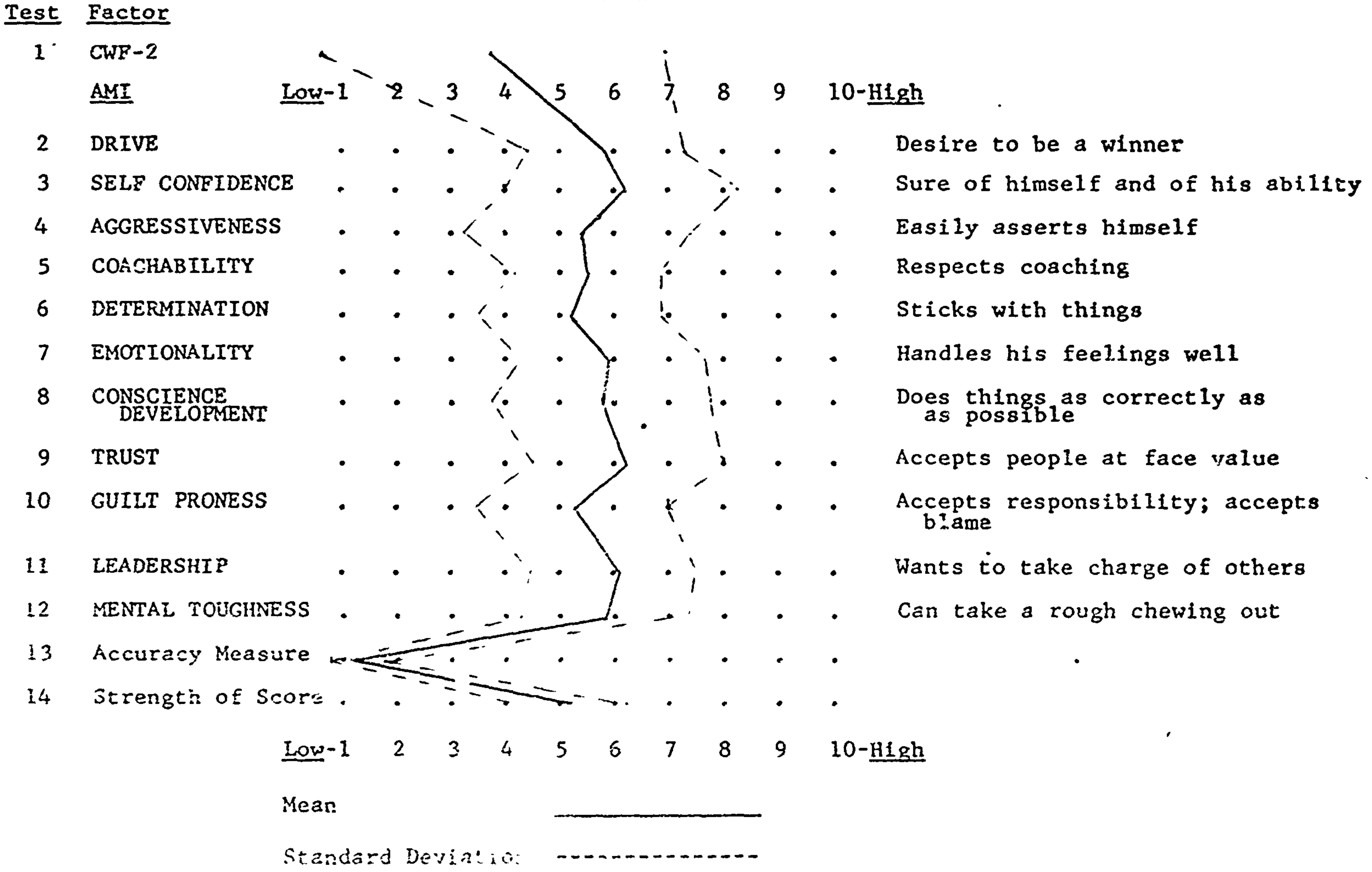
Test	Factor	Description
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13.	Accuracy Measure	
14	Strength of Score	

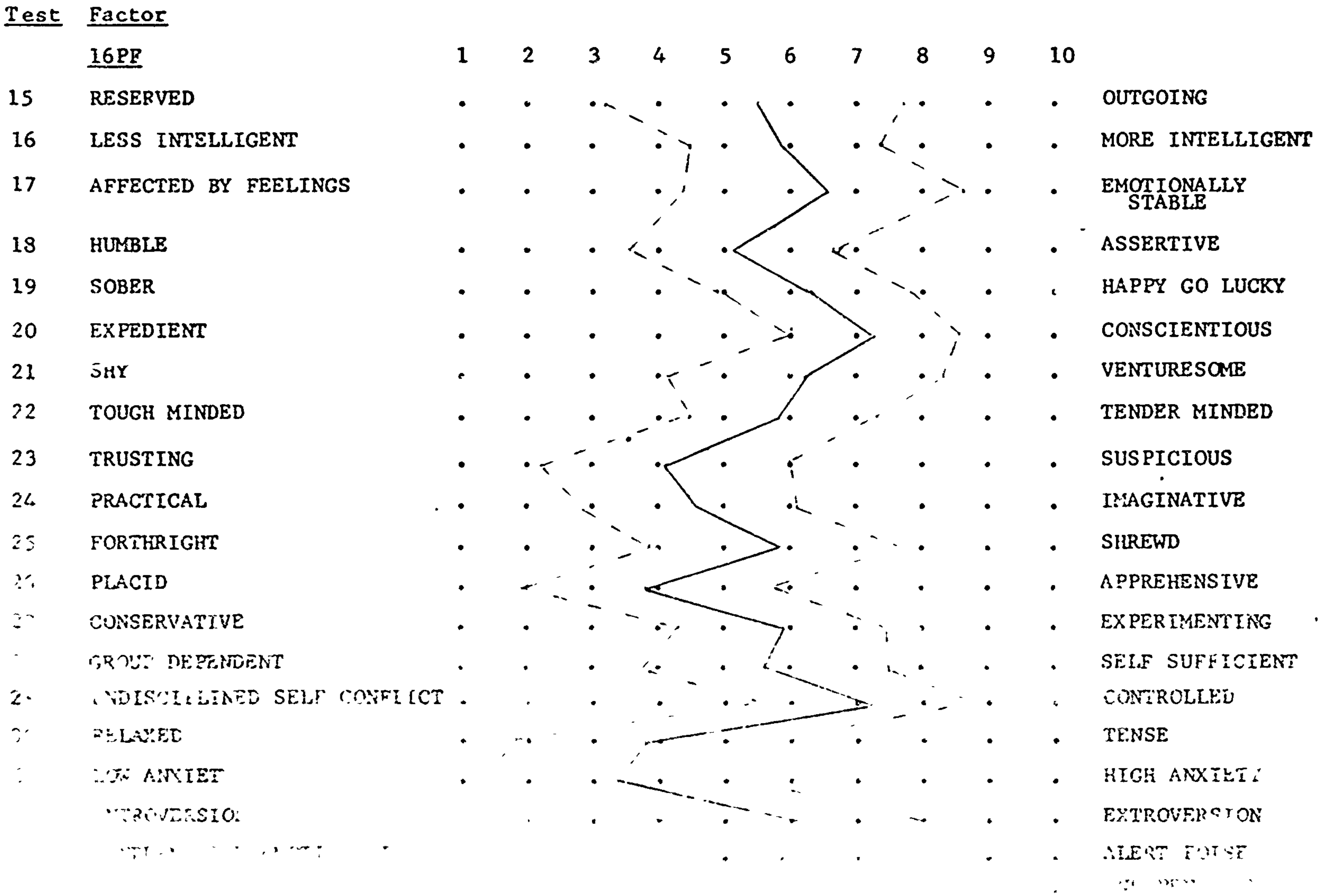

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
32 INTROVERSION
EXTROVERSION
ALERT POISE

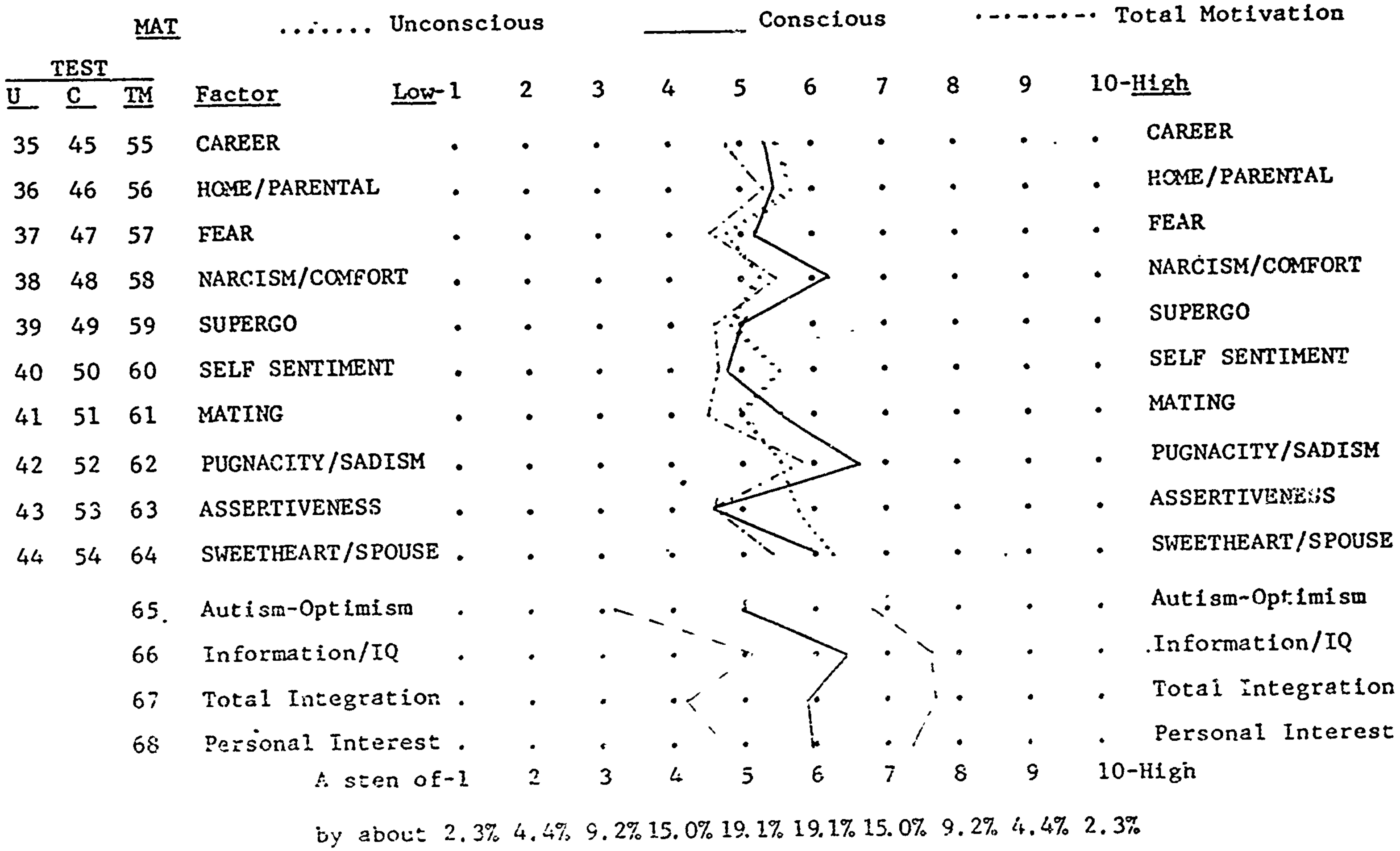


Note The above profile represent [illegible] scores with standard deviation scores for the [illegible] the "unconscious" scores; in table for the "conscious" [illegible]

Appx. No. 19 WR 9 Profile - Unsuccessful Wide Receivers

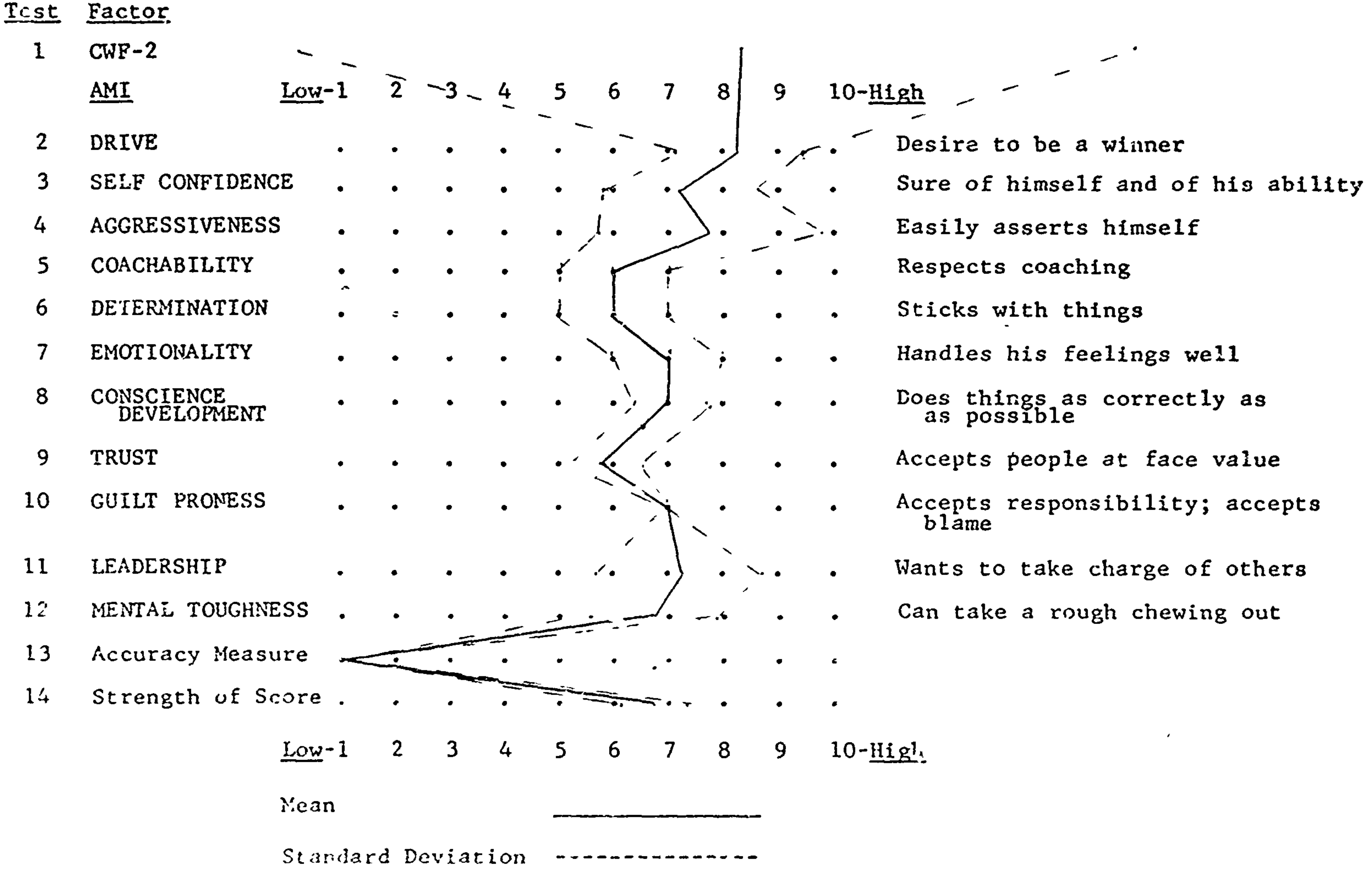


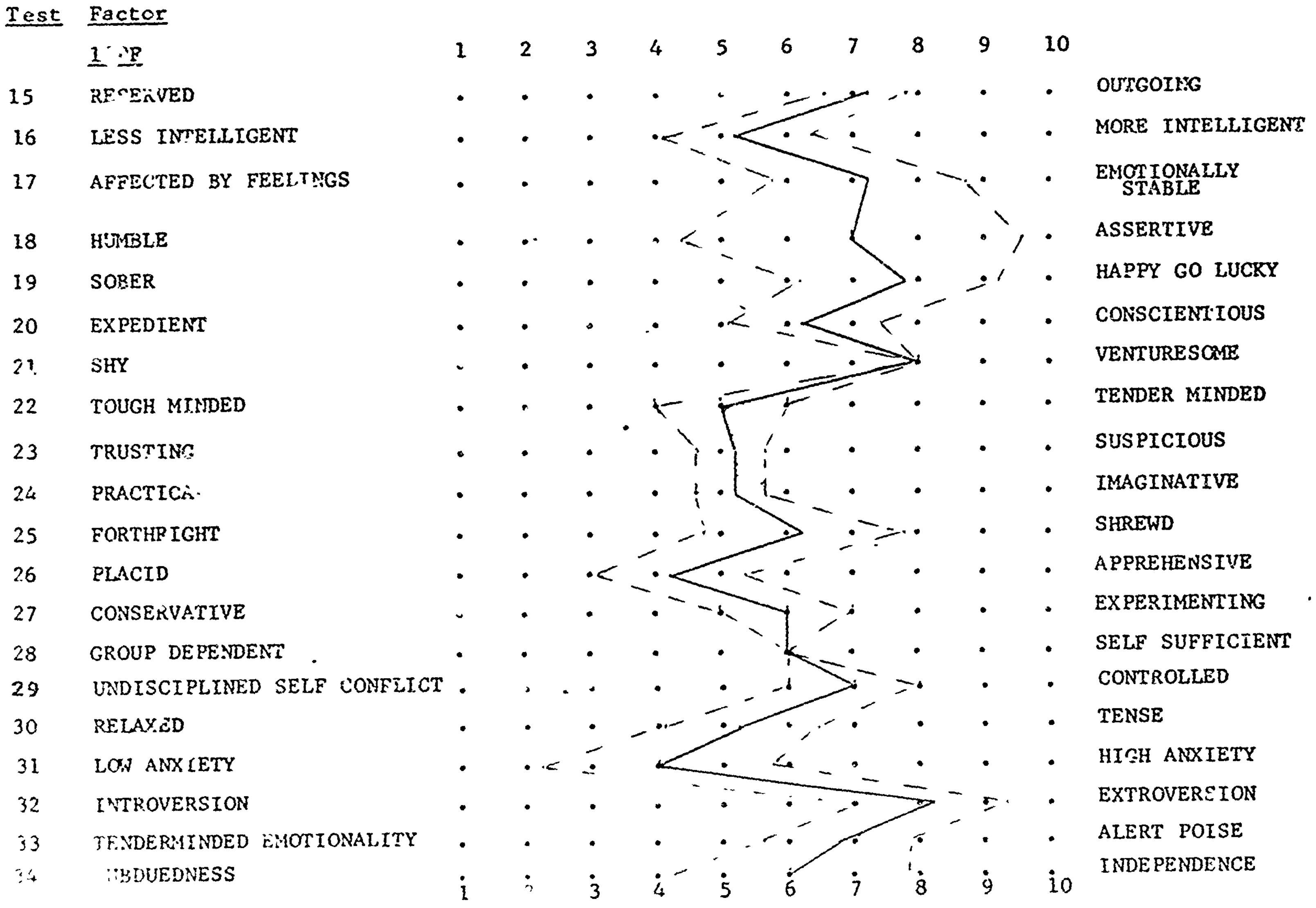

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
PLACID
APPREHENSIVE
CONSERVATIVE
EXPERIMENTING
GROUP DEPENDENT
SELF SUFFICIENT
UNDISCIPLINED SELF CONFLICT
CONTROLLED
RELAXED
TENSE
LOW ANXIETY
HIGH ANXIETY
INTROVERSION
EXTROVERSION
ALERT POISE

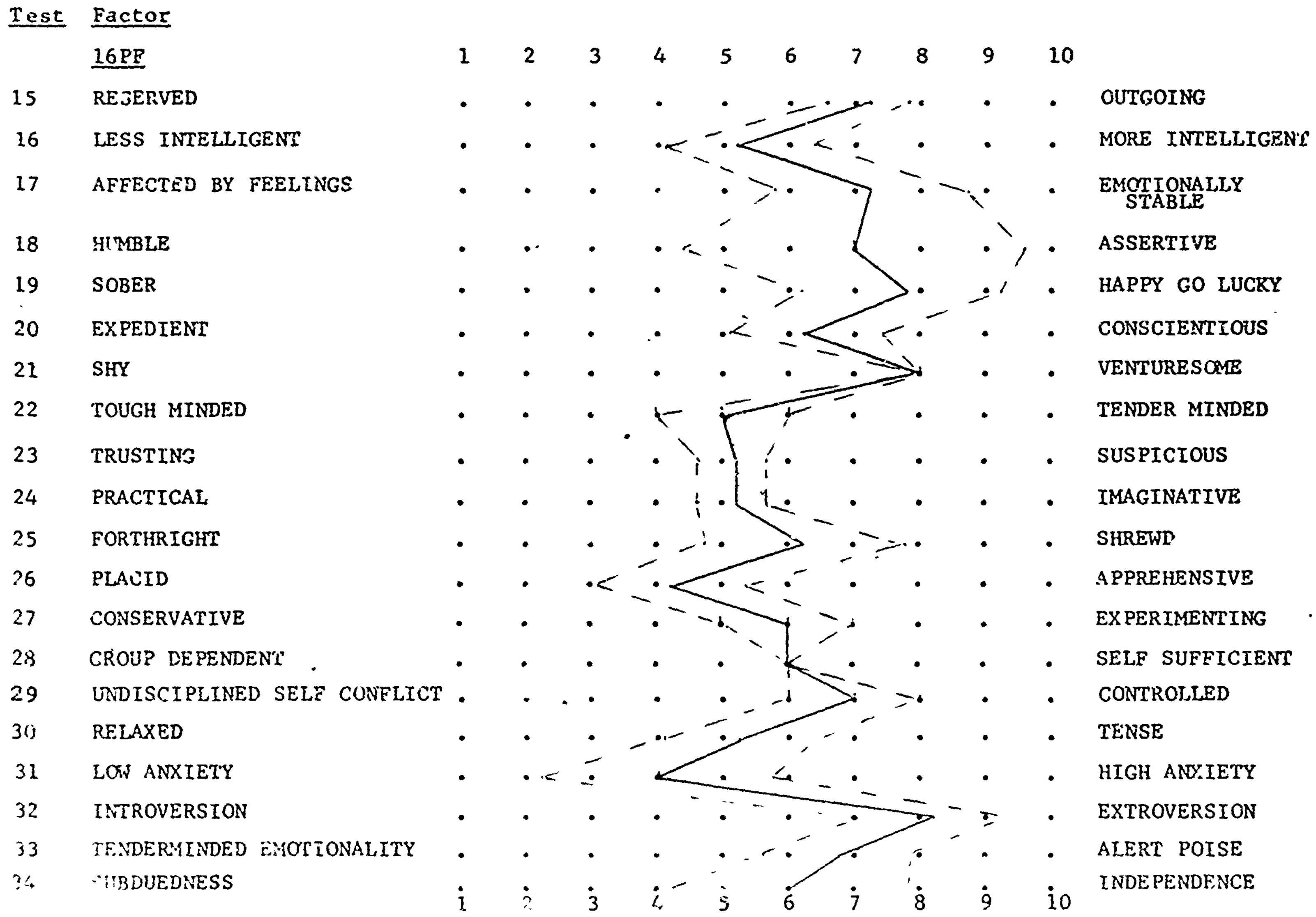


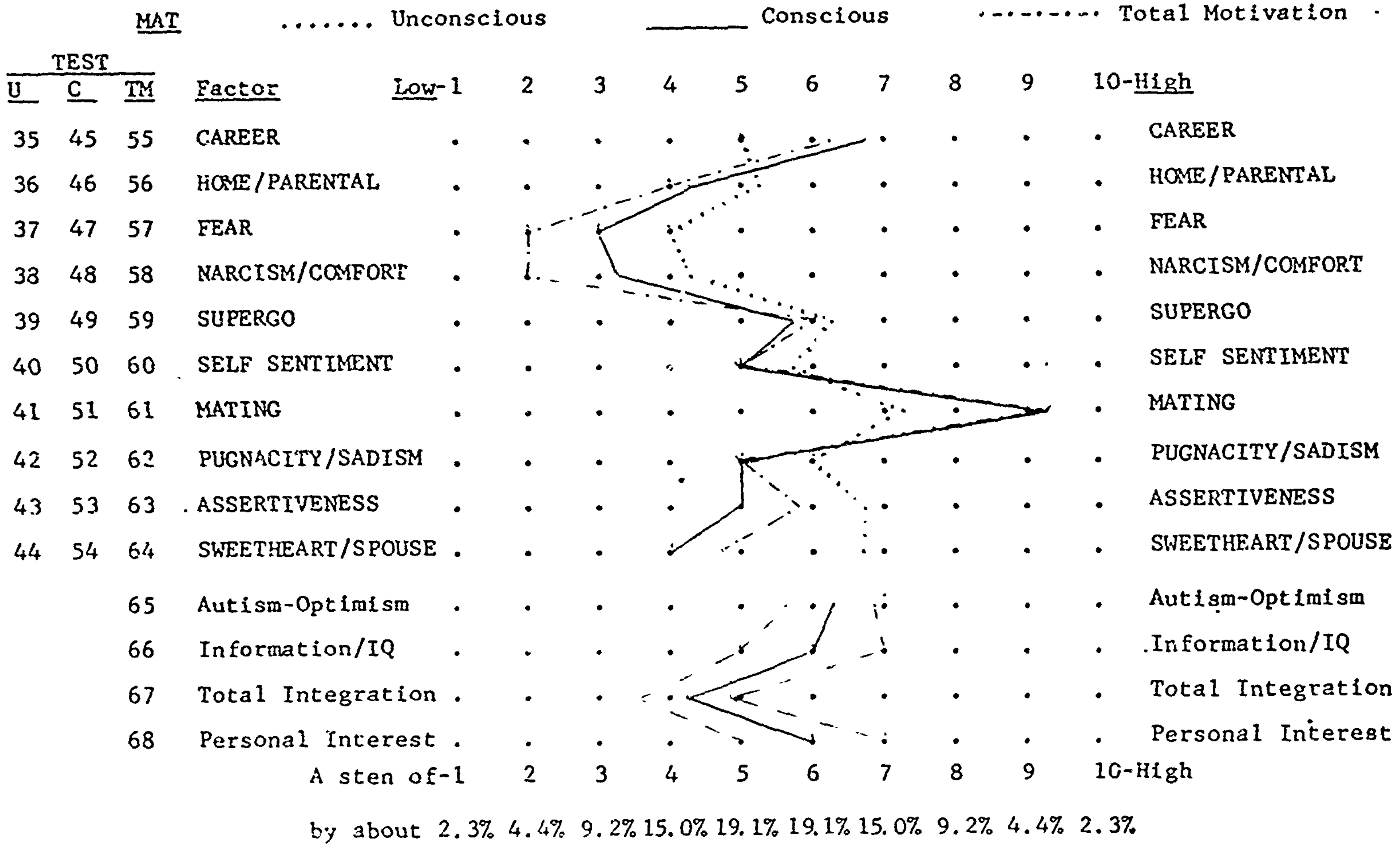
The above profile represents [illegible] scores with standard deviation scores for the
[illegible]

Appx. No. 20 QB 1 Profile - Successful Quarterbacks



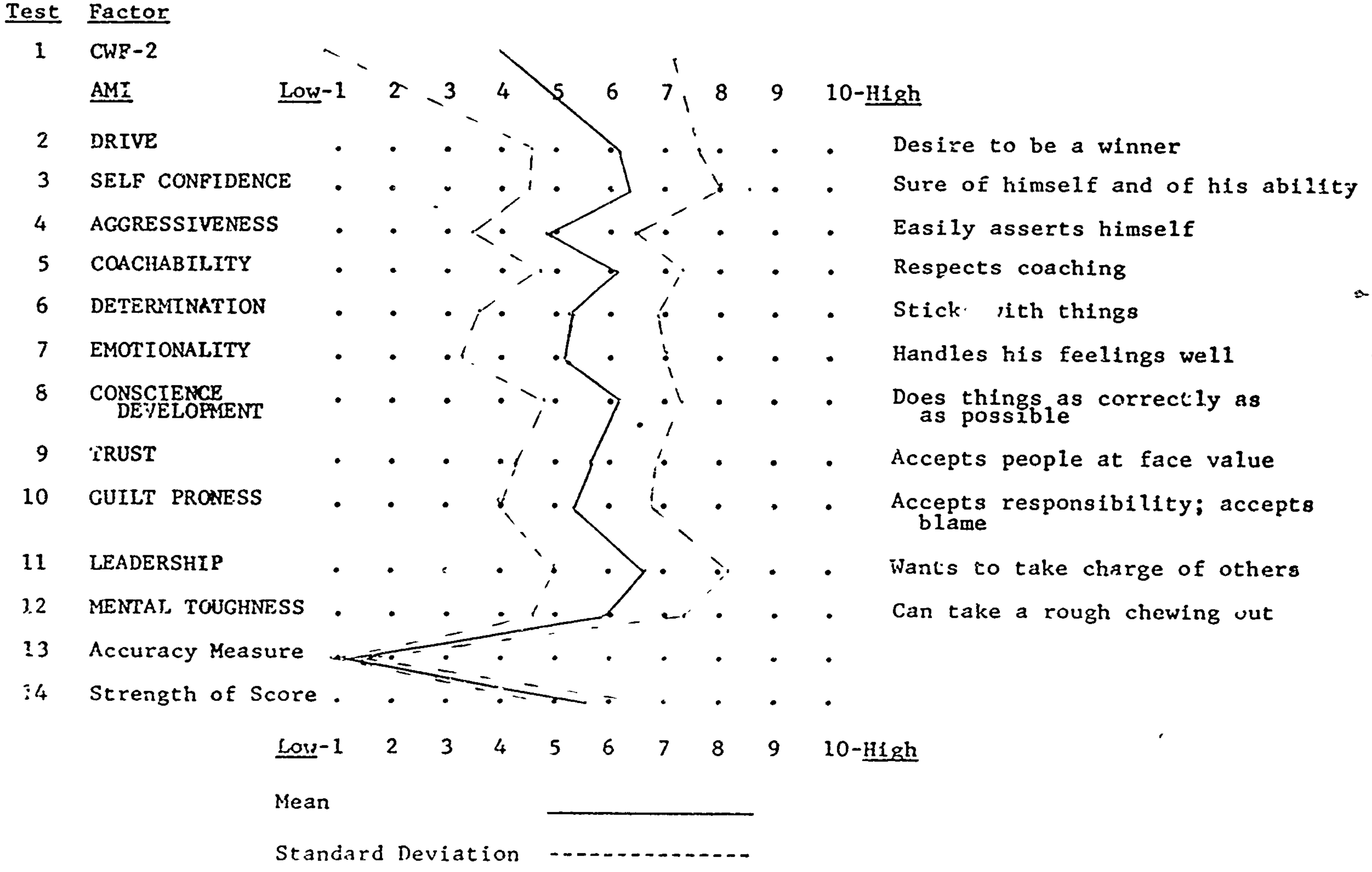

Test
Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
32 INTROVERSION
EXTROVERSION
33 TENDERMINDED EMOTIONALITY
ALERT POISE
34 SUBDUEDNESS
INDEPENDENCE
1 2 3 4 5 6 7 8 9 10

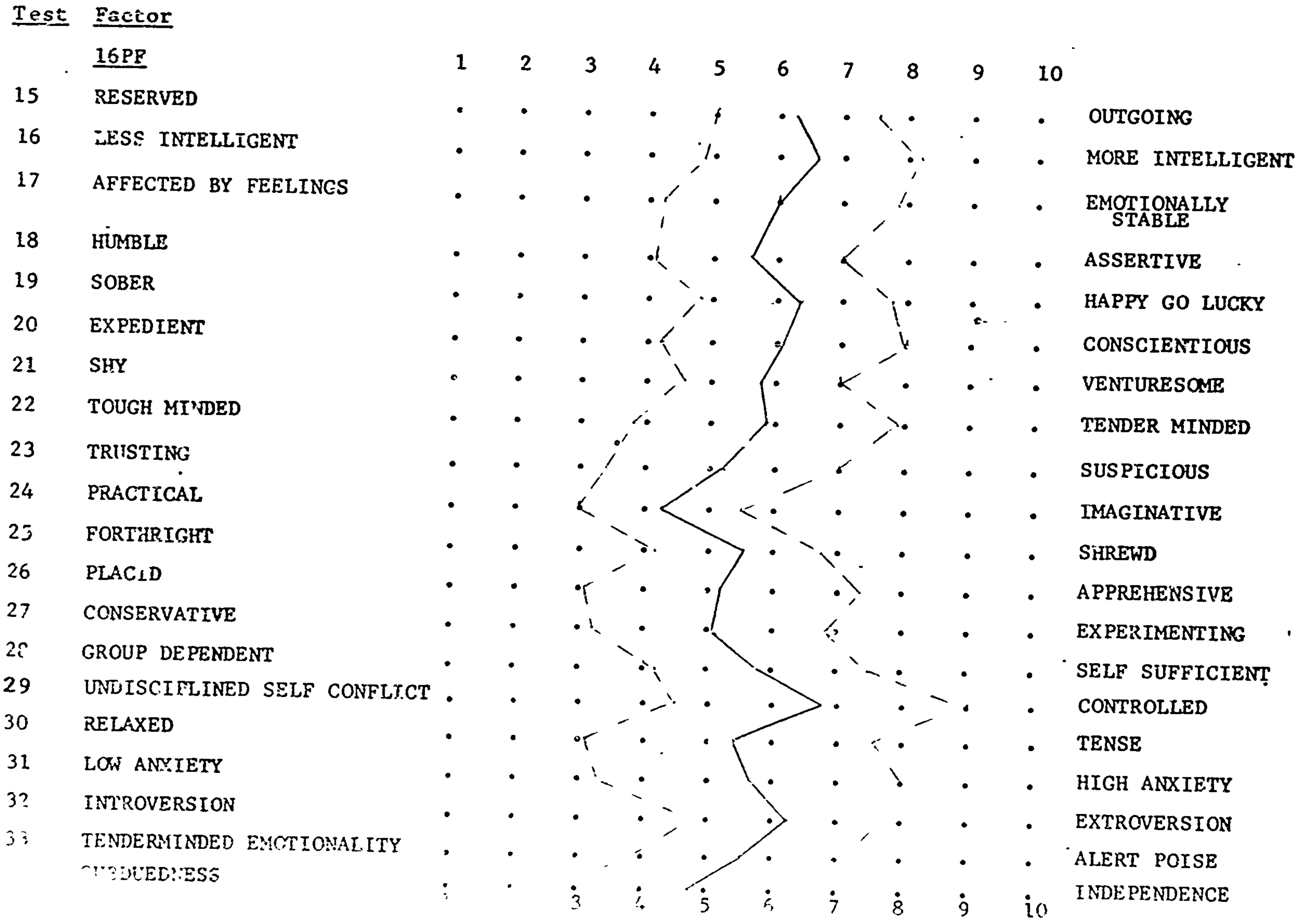

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
32 INTROVERSION
EXTROVERSION
33 TENDERMINDED EMOTIONALITY
ALERT POISE
34 SUBDUEDNESS
INDEPENDENCE

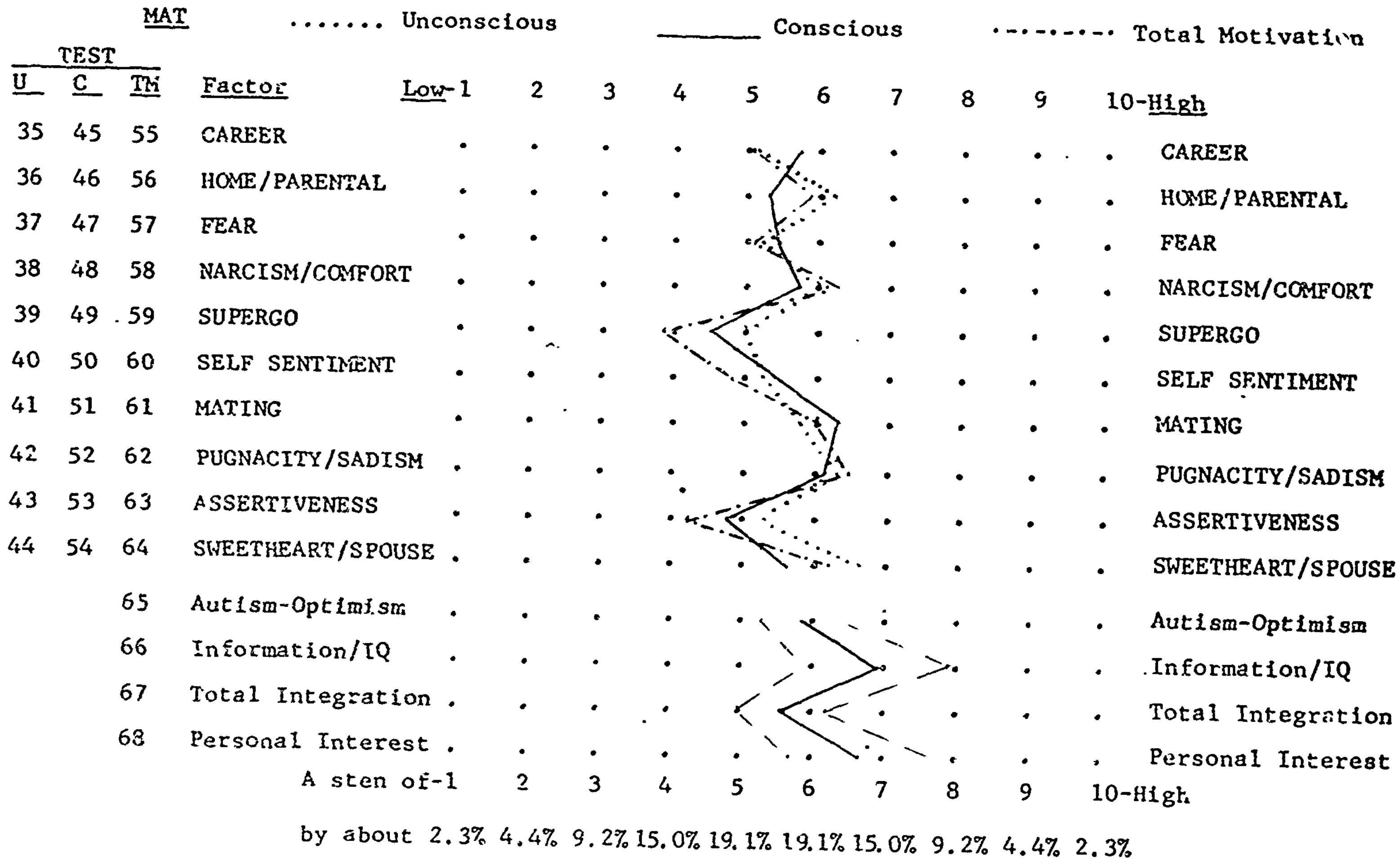


The above profile represents mean scores with standard deviation scores for the [illegible] to be found in table [illegible] for the "unconscious" scores; in table for the "conscious" [illegible] total motivation scores."

Appx. No 21 QB 9 Profile - Unsuccessful Quarterbacks

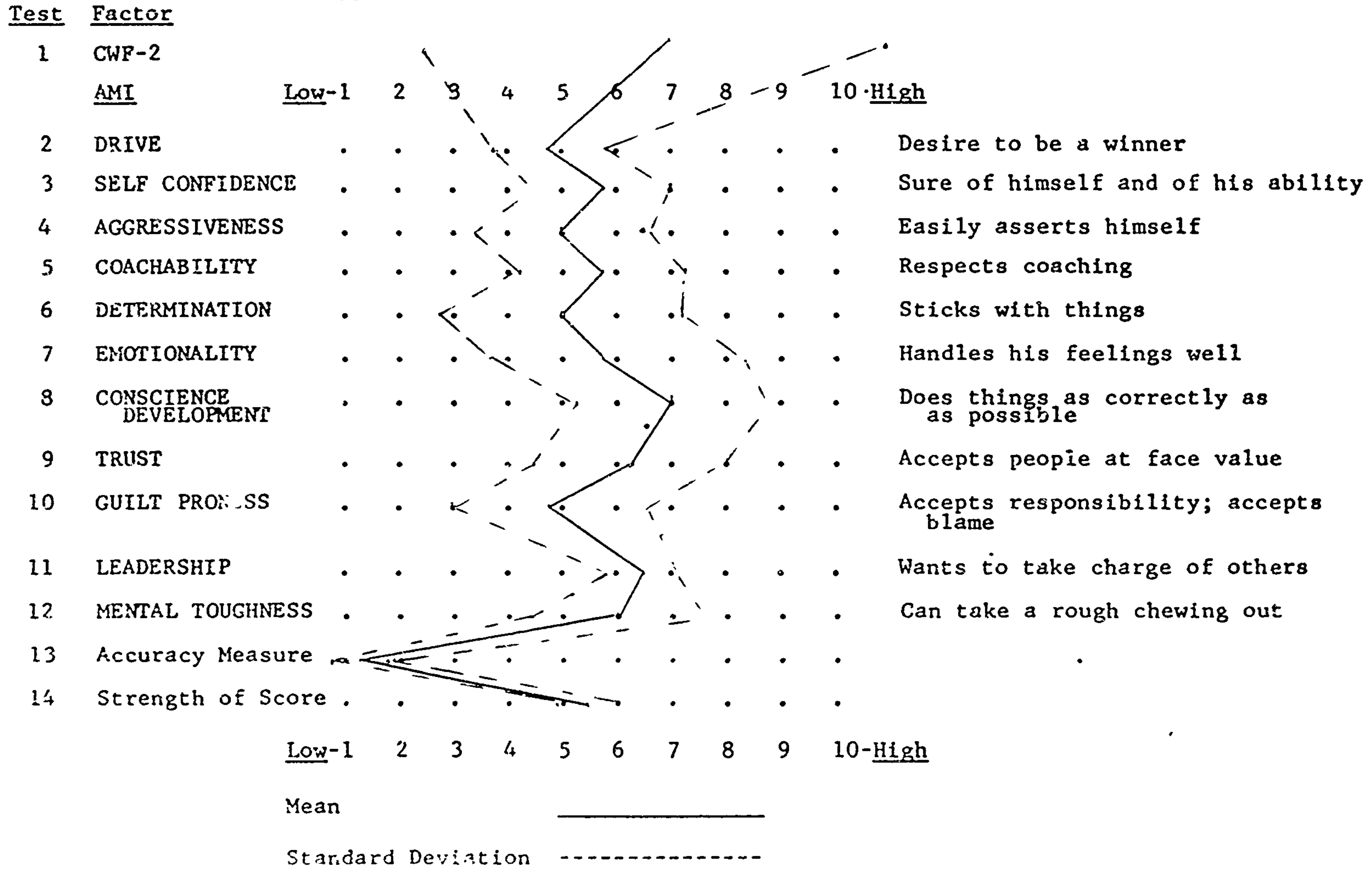


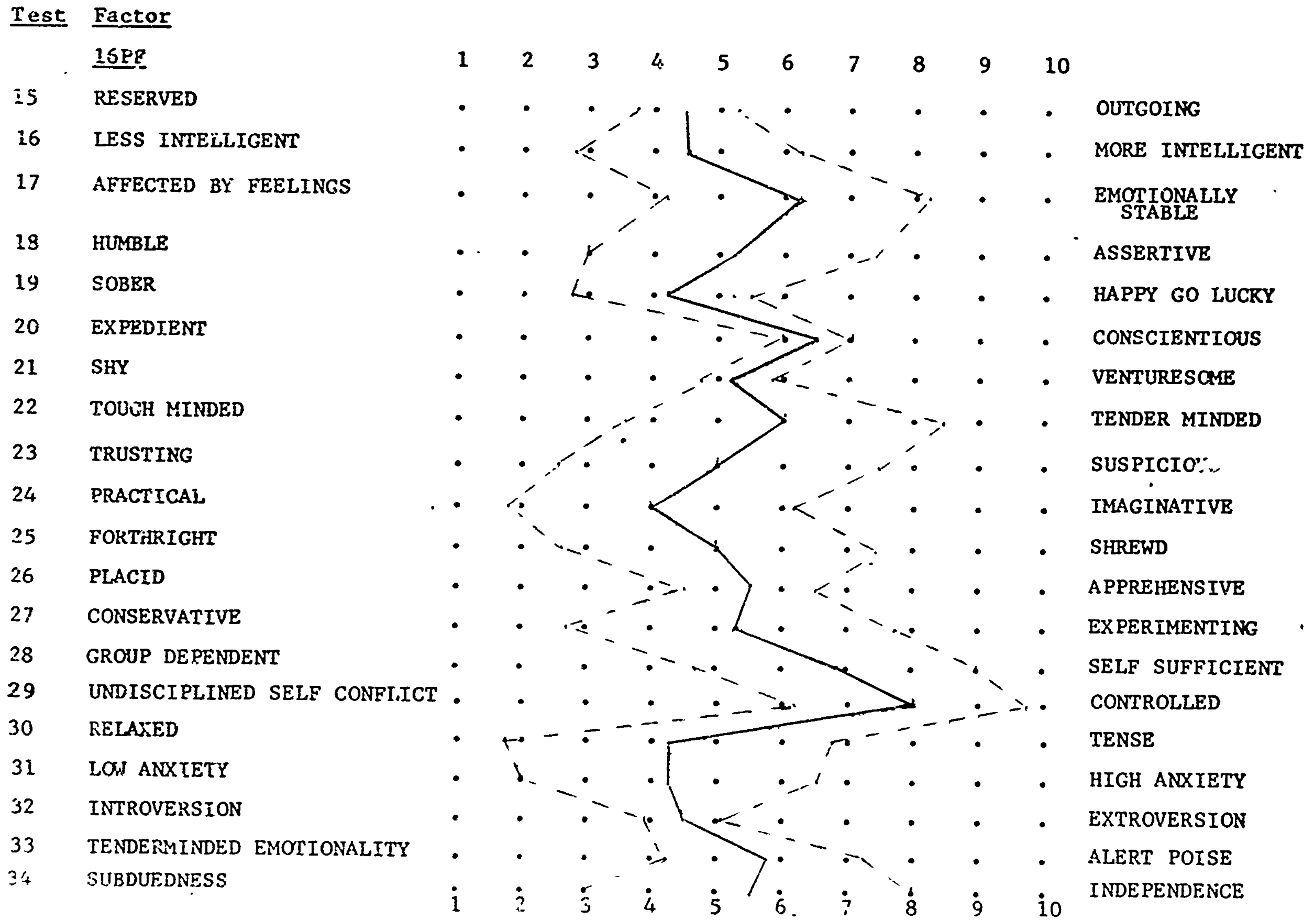

Test Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED — OUTGOING
16 LESS INTELLIGENT — MORE INTELLIGENT
17 AFFECTED BY FEELINGS — EMOTIONALLY STABLE
18 HUMBLE — ASSERTIVE
19 SOBER — HAPPY GO LUCKY
20 EXPEDIENT — CONSCIENTIOUS
21 SHY — VENTURESOME
22 TOUGH MINDED — TENDER MINDED
23 TRUSTING — SUSPICIOUS
24 PRACTICAL — IMAGINATIVE
25 FORTHRIGHT — SHREWD
26 PLACID — APPREHENSIVE
27 CONSERVATIVE — EXPERIMENTING
28 GROUP DEPENDENT — SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT — CONTROLLED
30 RELAXED — TENSE
31 LOW ANXIETY — HIGH ANXIETY
32 INTROVERSION — EXTROVERSION
33 TENDERMINDED EMOTIONALITY — ALERT POISE
SUBDUEDNESS — INDEPENDENCE
3 4 5 6 7 8 9 10

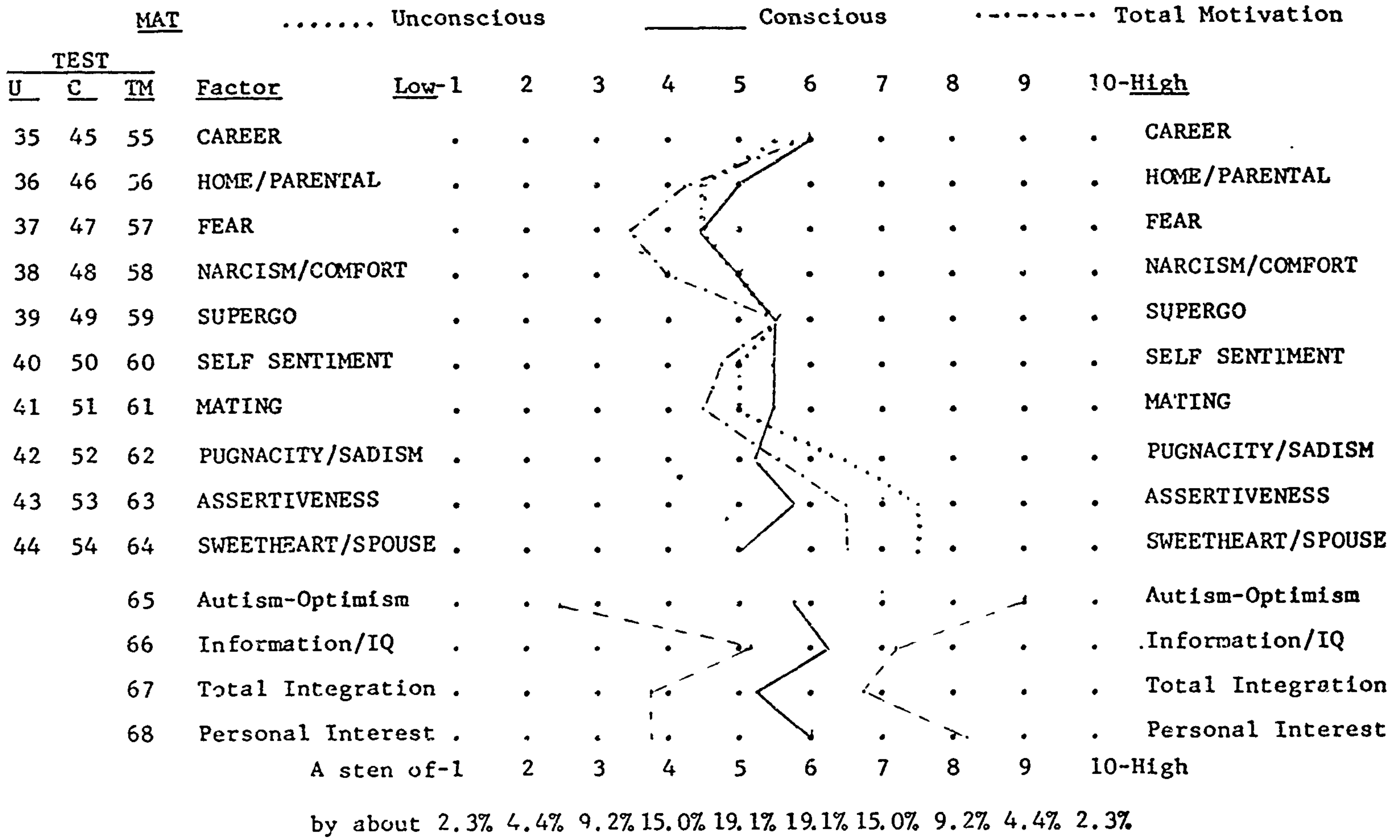


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" [illegible] table for the total motivation scores."

Appx. No. 22 DE 1 Profile - Successful Defensive Ends



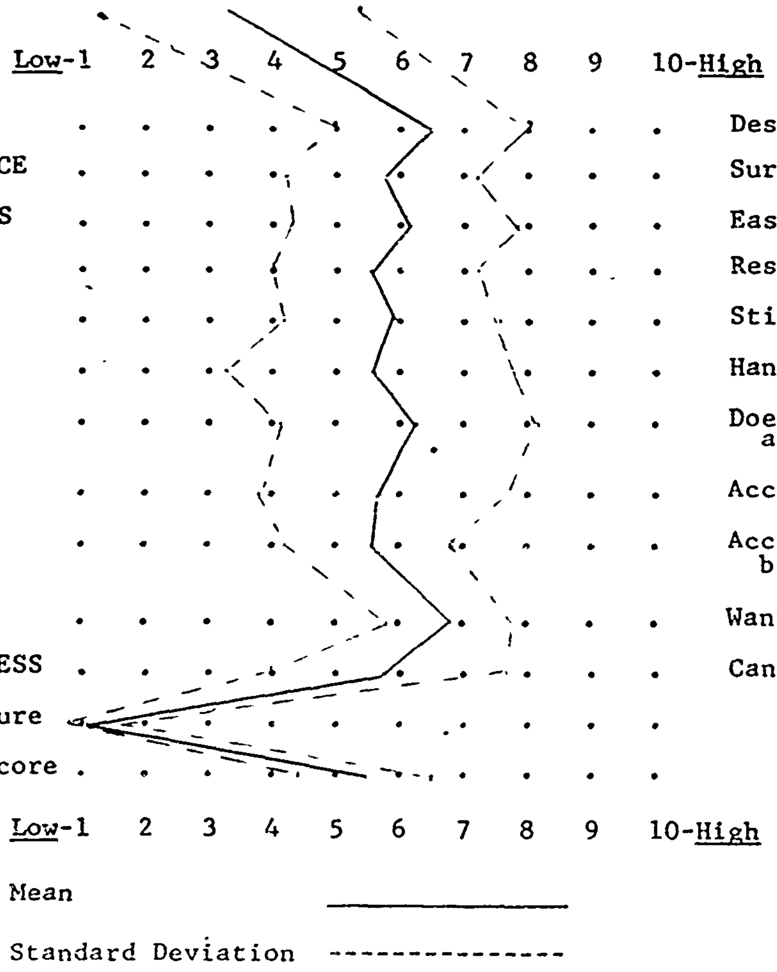

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
32 INTROVERSION
EXTROVERSION
33 TENDERMINDED EMOTIONALITY
ALERT POISE
34 SUBDUEDNESS
INDEPENDENCE

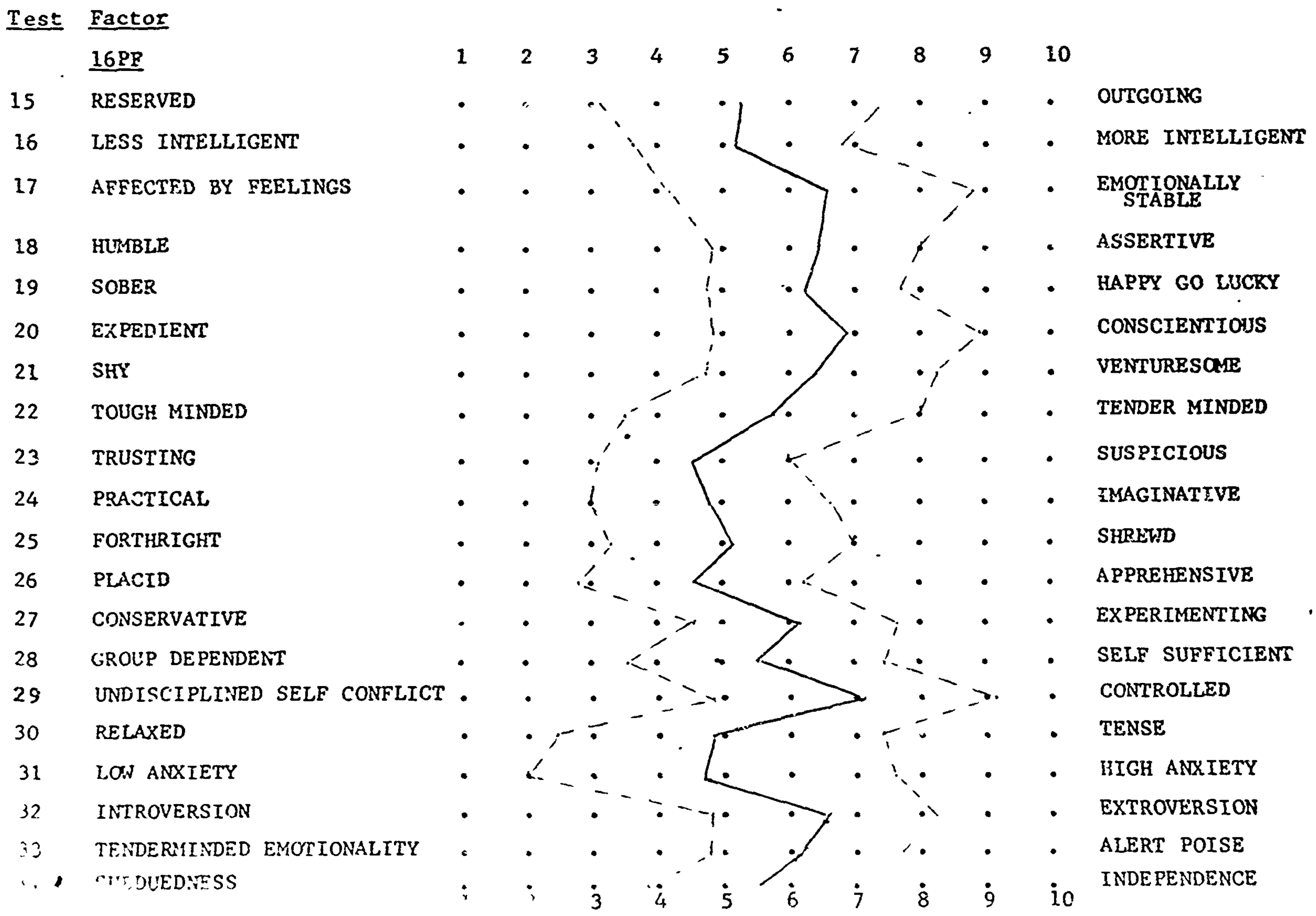


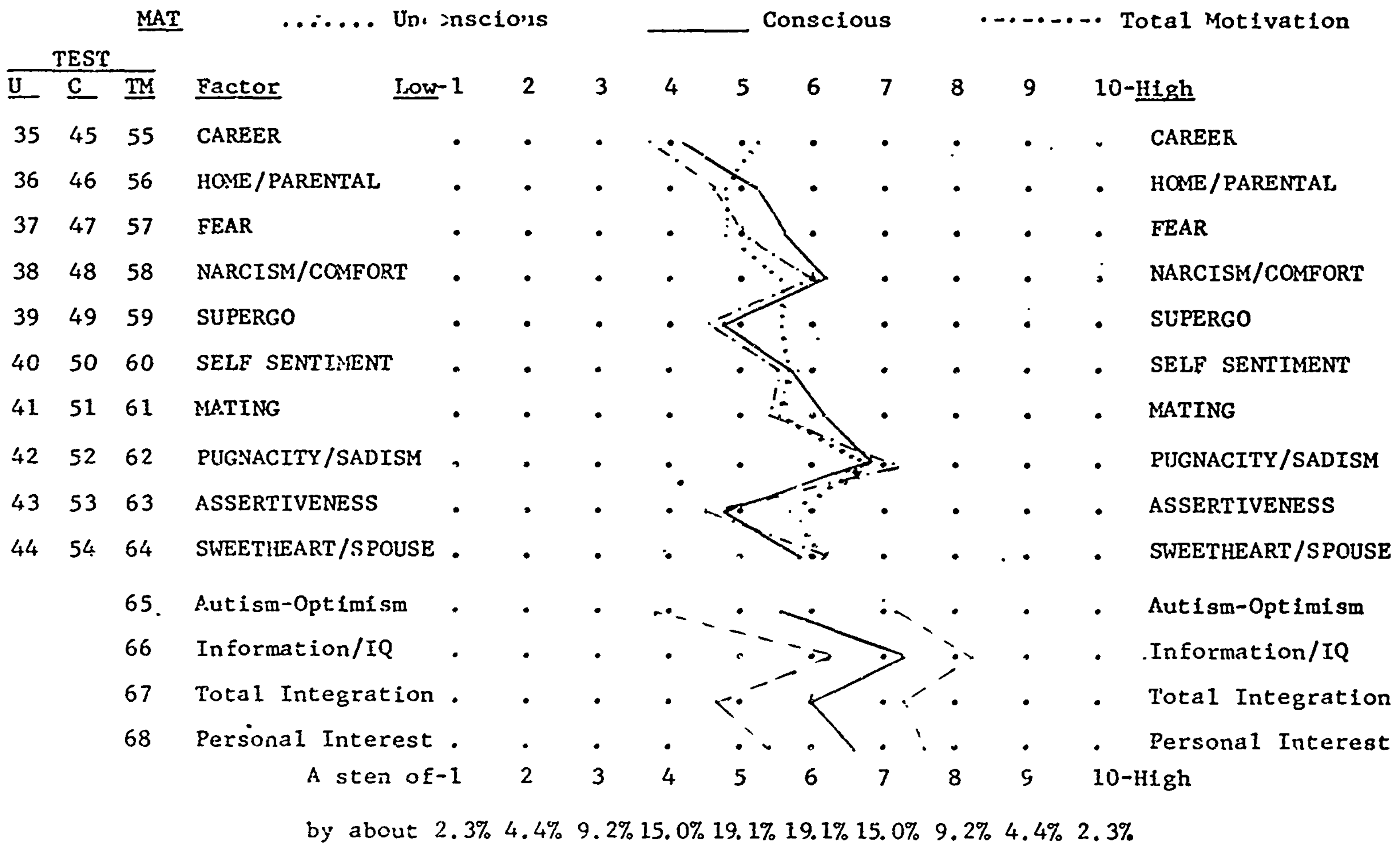
Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appx. No. 23 DE 9 Profile - Unsuccessful Defensive Ends

Test	Factor	
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13	Accuracy Measure	
14	Strength of Score	

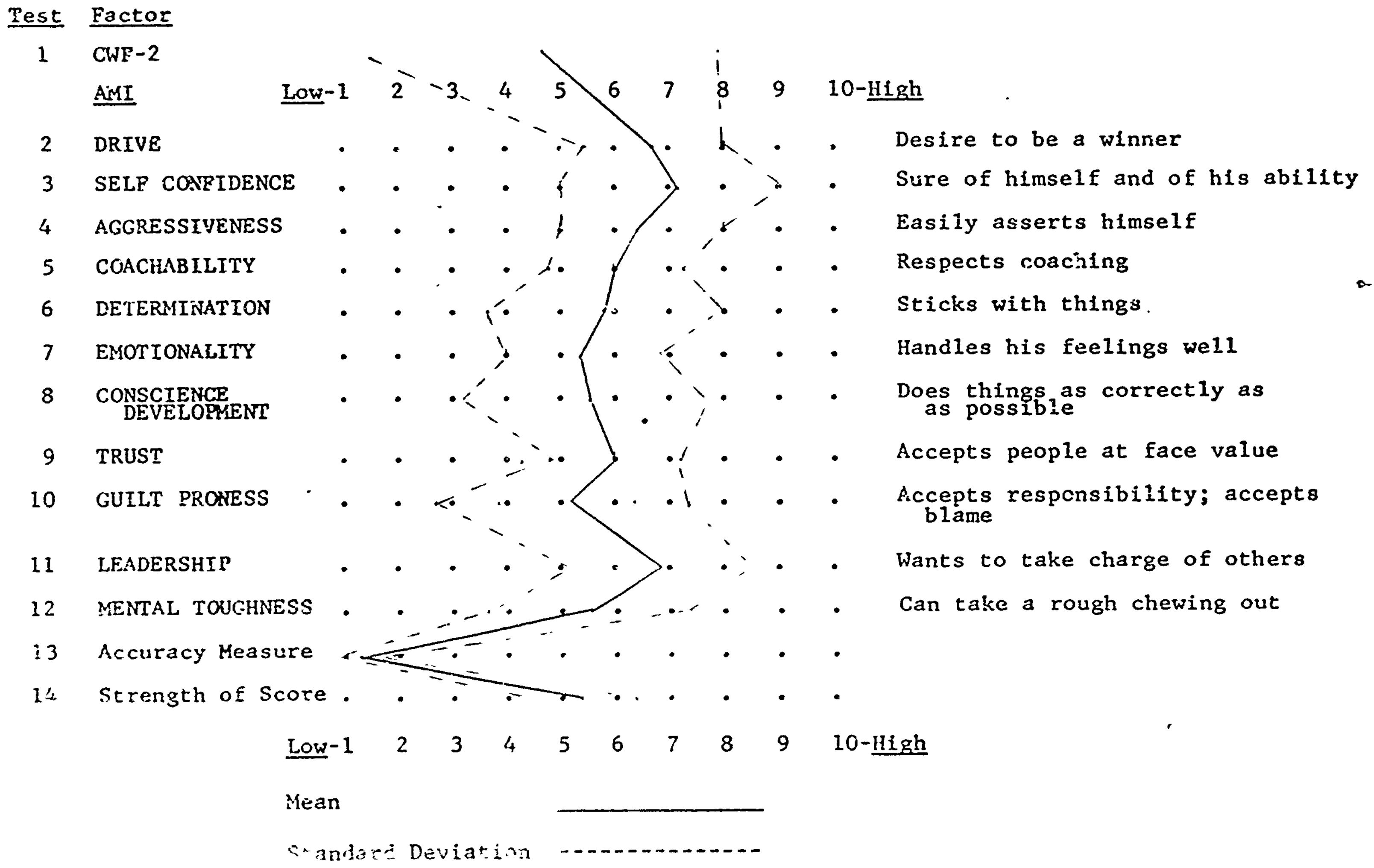


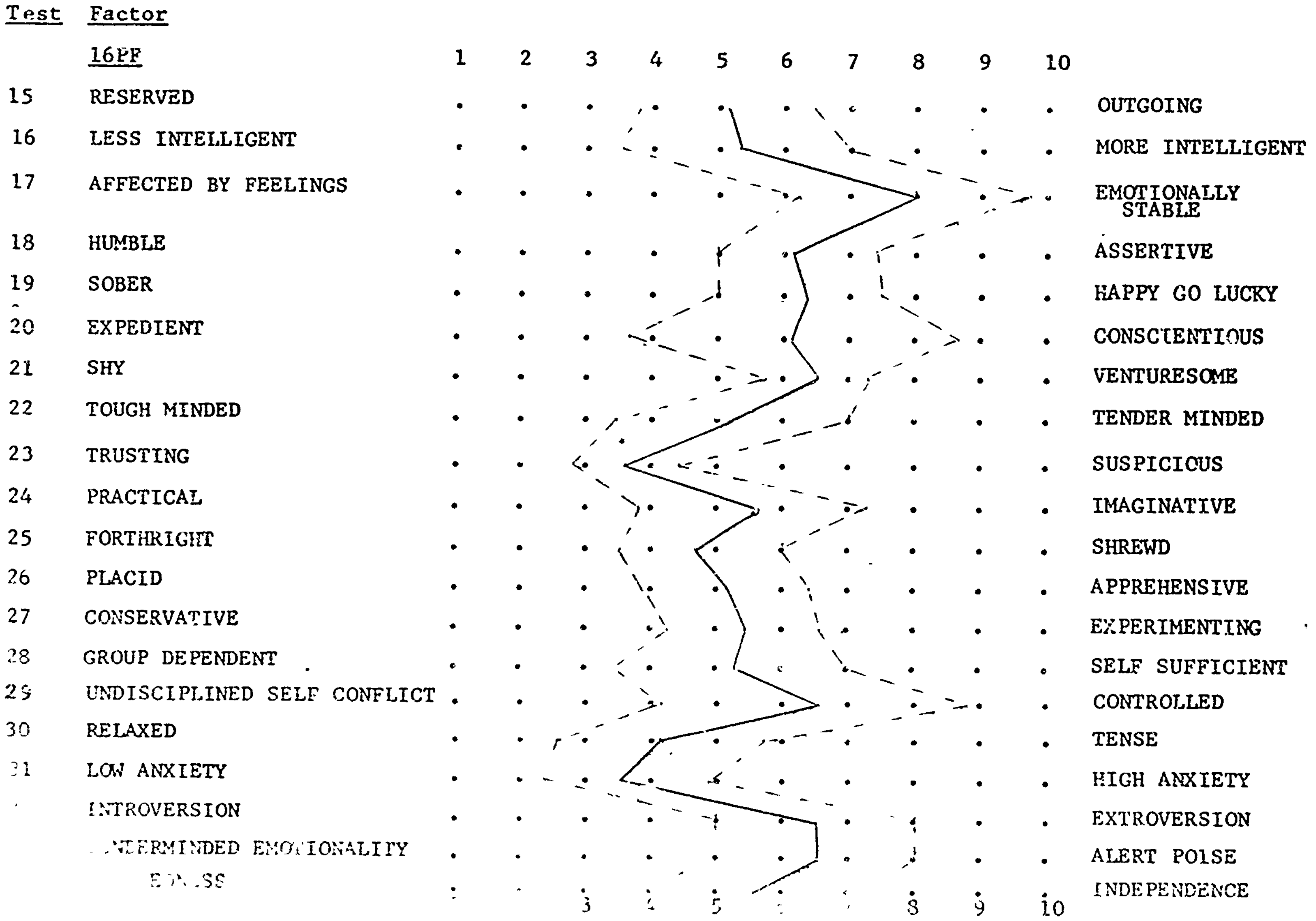

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
16 LESS INTELLIGENT
17 AFFECTED BY FEELINGS
18 HUMBLE
19 SOBER
20 EXPEDIENT
21 SHY
22 TOUGH MINDED
23 TRUSTING
24 PRACTICAL
25 FORTHRIGHT
26 PLACID
27 CONSERVATIVE
28 GROUP DEPENDENT
29 UNDISCIPLINED SELF CONFLICT
30 RELAXED
31 LOW ANXIETY
32 INTROVERSION
33 TENDERMINDED EMOTIONALITY
SUBDUEDNESS
OUTGOING
MORE INTELLIGENT
EMOTIONALLY STABLE
ASSERTIVE
HAPPY GO LUCKY
CONSCIENTIOUS
VENTURESOME
TENDER MINDED
SUSPICIOUS
IMAGINATIVE
SHREWD
APPREHENSIVE
EXPERIMENTING
SELF SUFFICIENT
CONTROLLED
TENSE
HIGH ANXIETY
EXTROVERSION
ALERT POISE
INDEPENDENCE
3
4
5
6
7
8
9
10

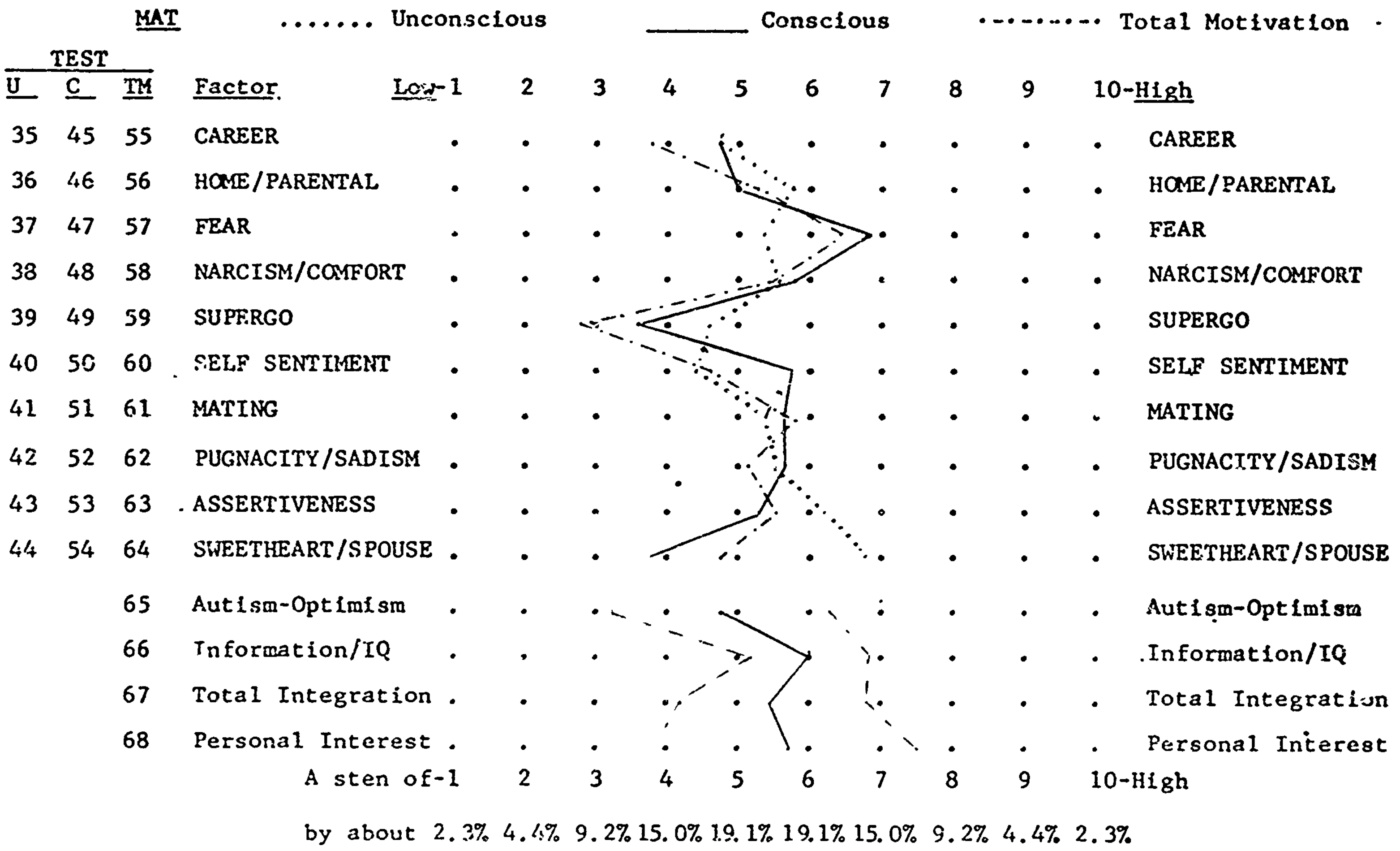


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores, and in table for the "total motivation scores."

Appx No. 24 LB 1 ____ Profile - Successful Linebackers



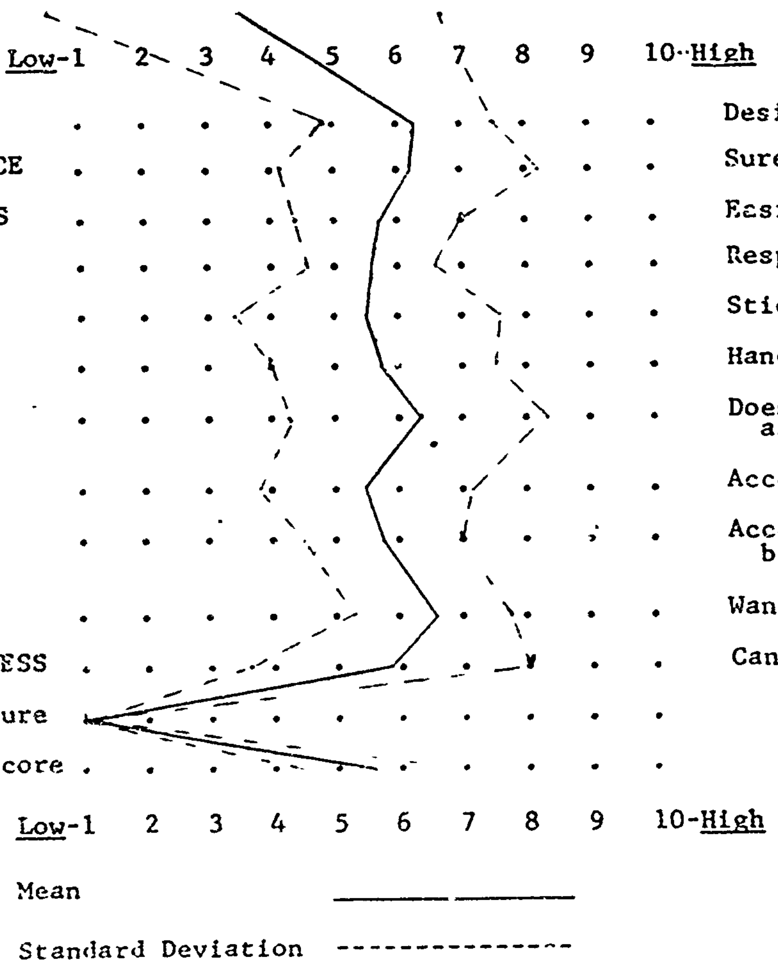

Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
INTROVERSION
EXTROVERSION
TENDERMINDED EMOTIONALITY
ALERT POISE
EDNESS
INDEPENDENCE
3
4
5
8
9
10

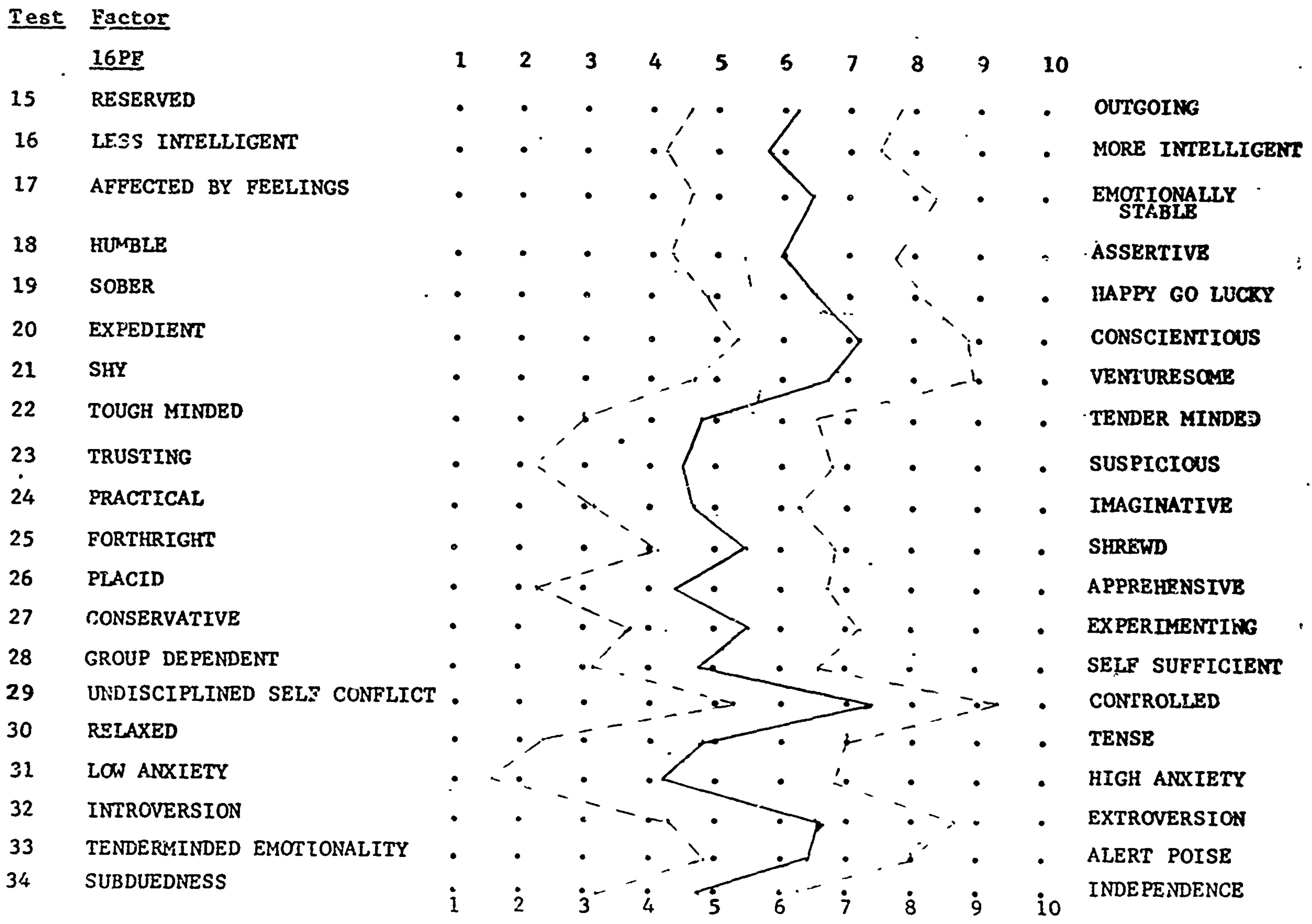


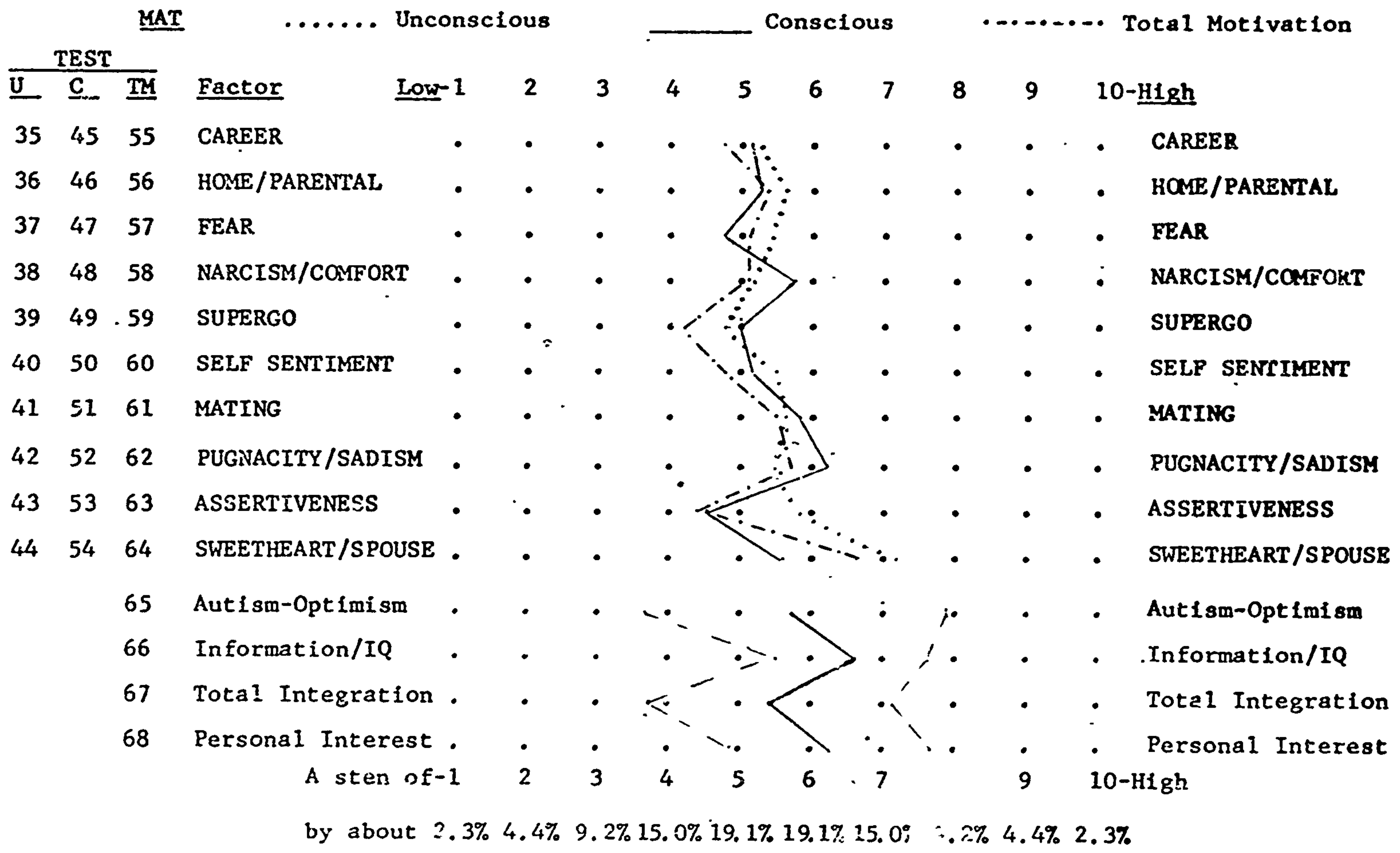
Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores and in table for the "total motivation scores."

Appx. No. 25 LB 9 Profile - Unsuccessful Linebackers

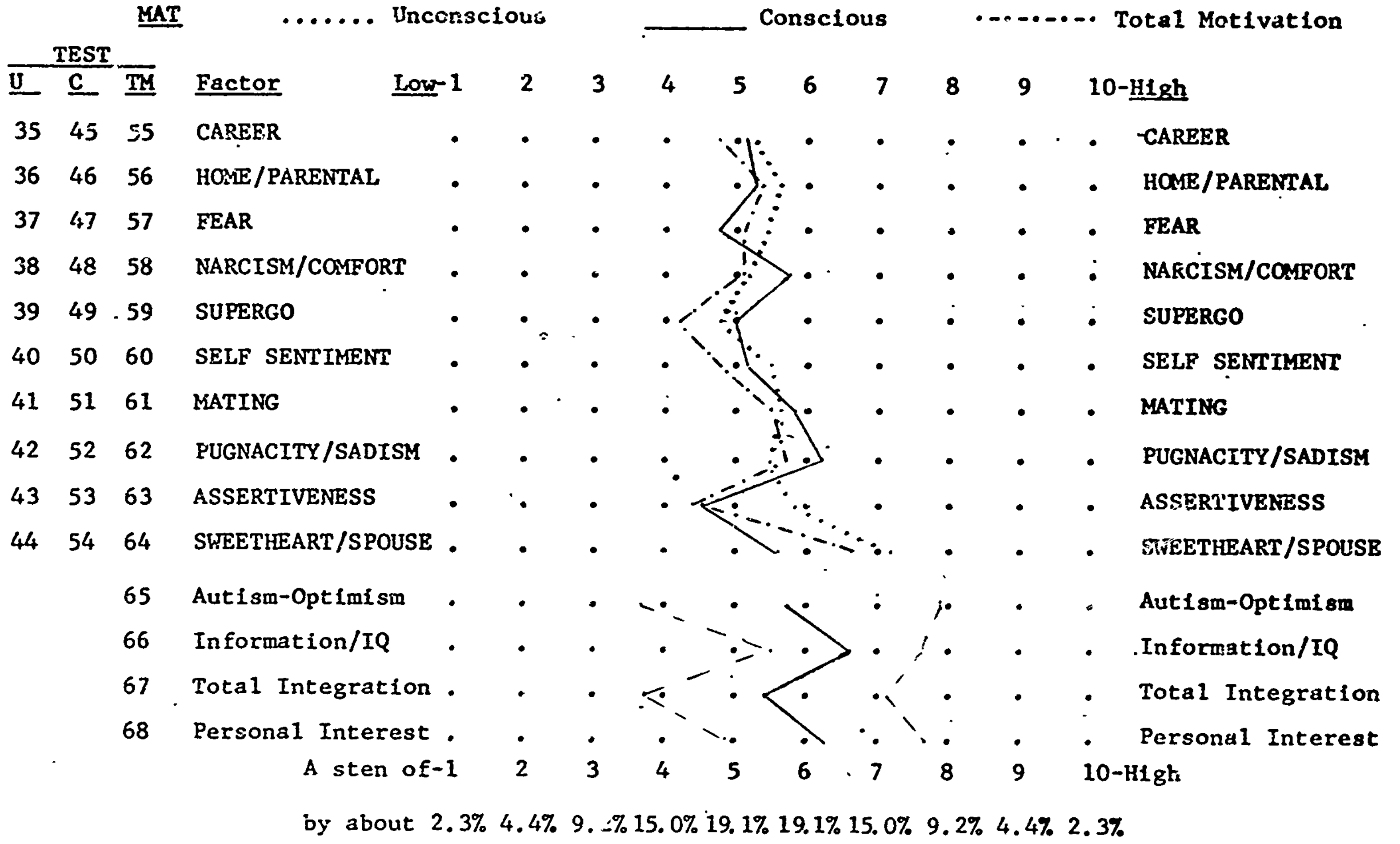
Test	Factor	
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13.	Accuracy Measure	
14	Strength of Score	




Test
Factor
16PF
1
2
3
4
5
6
7
8
9
10
15
RESERVED
OUTGOING
16
LESS INTELLIGENT
MORE INTELLIGENT
17
AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18
HUMBLE
ASSERTIVE
19
SOBER
HAPPY GO LUCKY
20
EXPEDIENT
CONSCIENTIOUS
21
SHY
VENTURESOME
22
TOUGH MINDED
TENDER MINDED
23
TRUSTING
SUSPICIOUS
24
PRACTICAL
IMAGINATIVE
25
FORTHRIGHT
SHREWD
26
PLACID
APPREHENSIVE
27
CONSERVATIVE
EXPERIMENTING
28
GROUP DEPENDENT
SELF SUFFICIENT
29
UNDISCIPLINED SELF CONFLICT
CONTROLLED
30
RELAXED
TENSE
31
LOW ANXIETY
HIGH ANXIETY
32
INTROVERSION
EXTROVERSION
33
TENDERMINDED EMOTIONALITY
ALERT POISE
34
SUBDUEDNESS
INDEPENDENCE
1
2
3
4
5
6
7
8
9
10

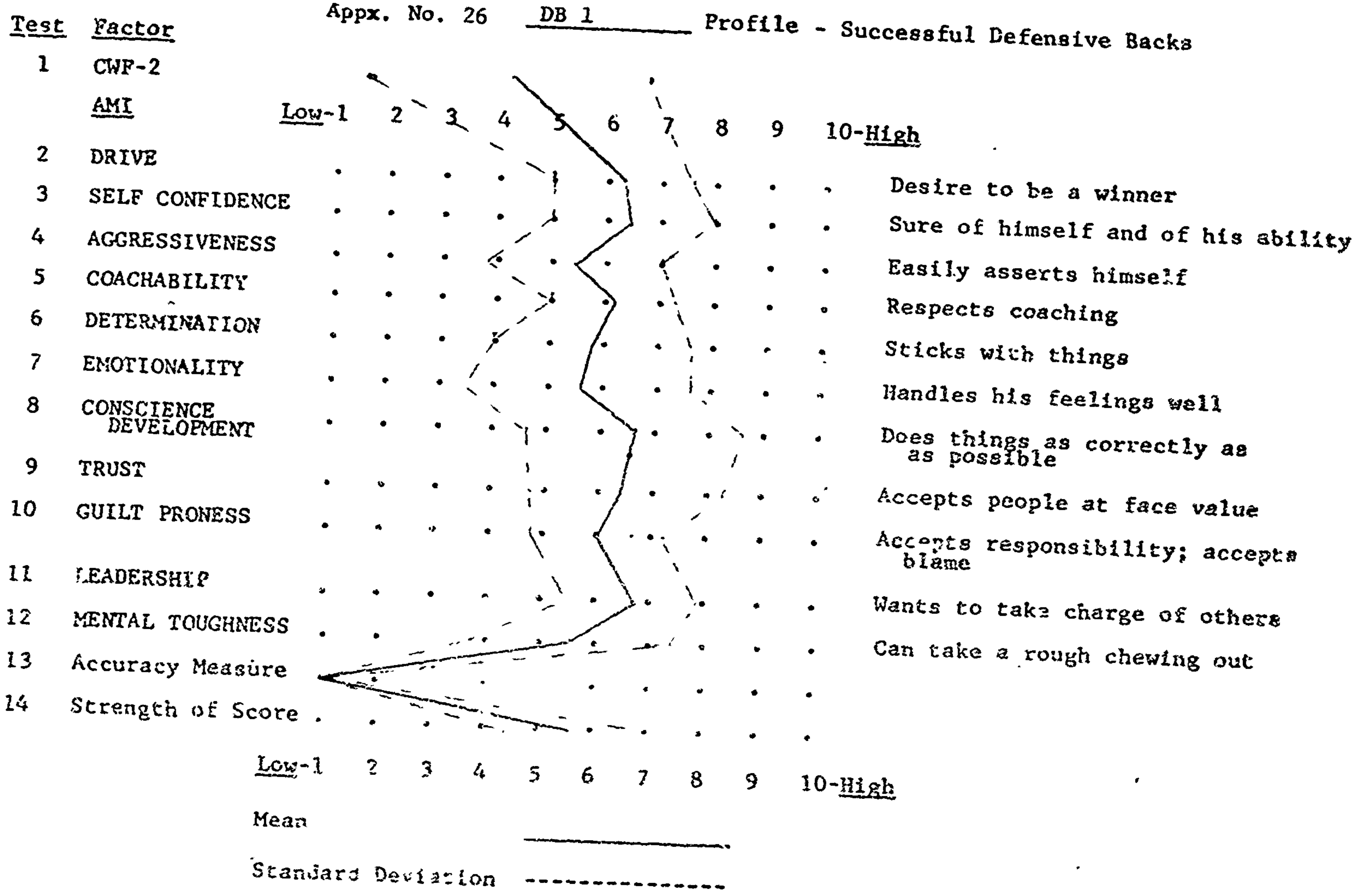


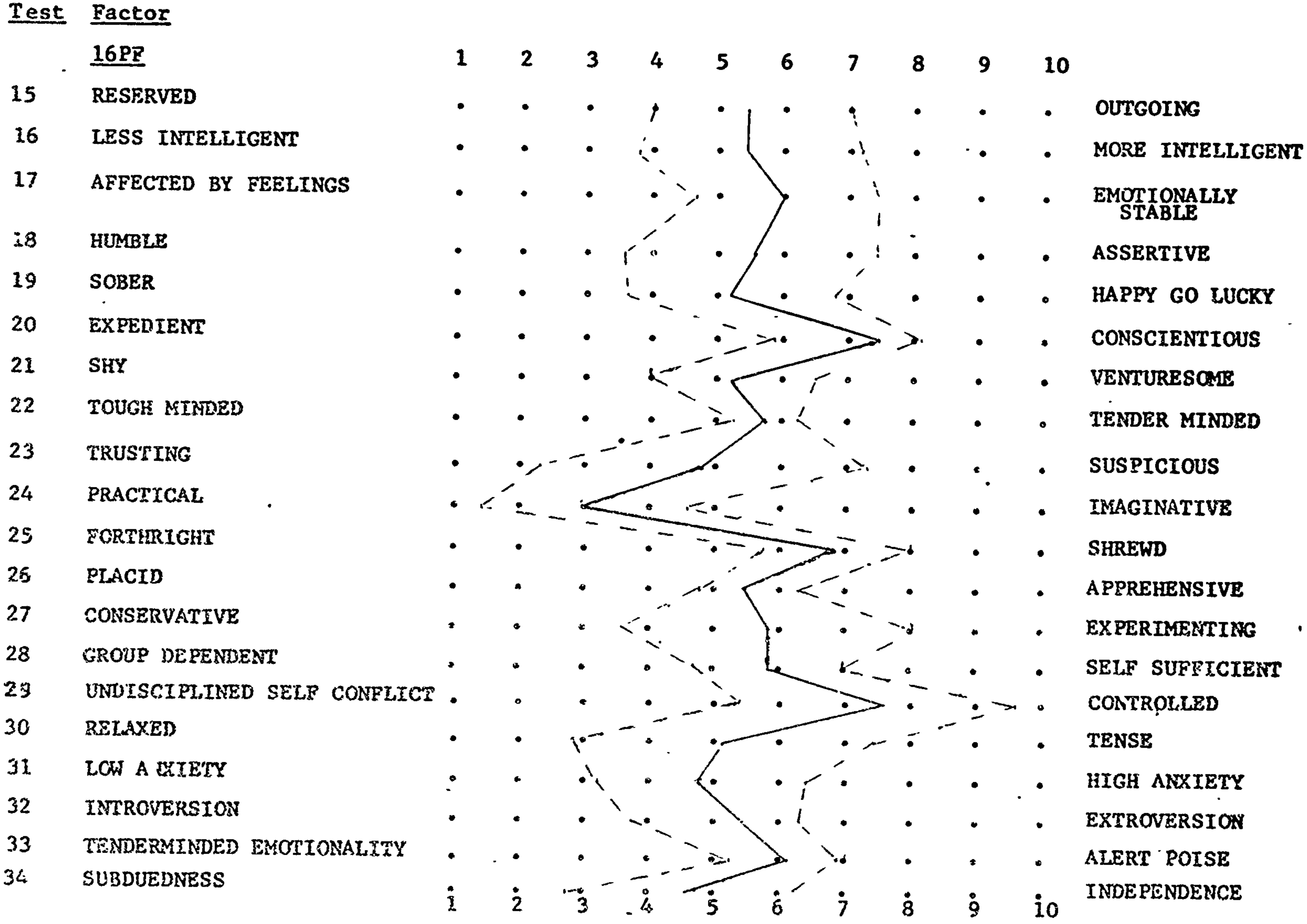
Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

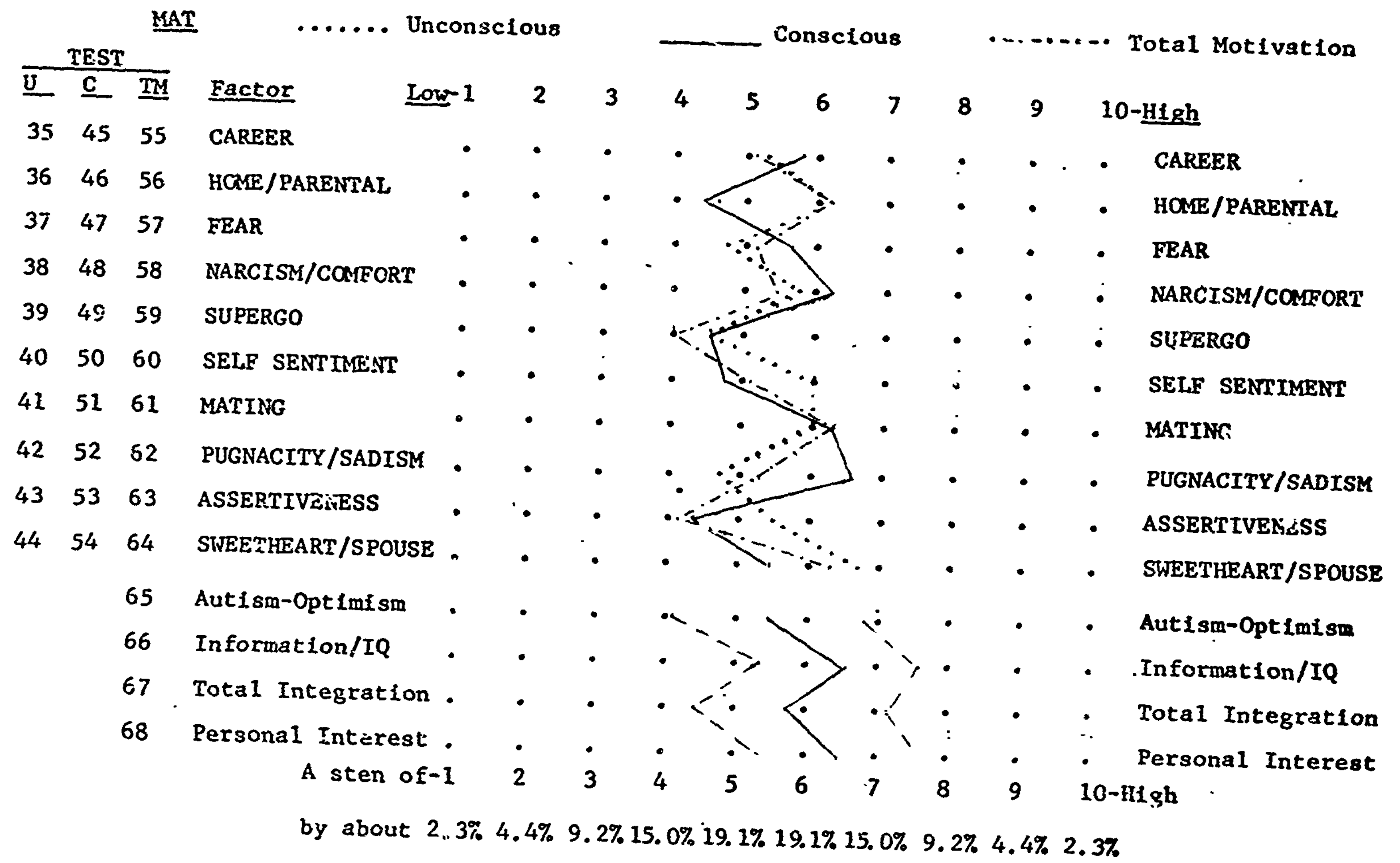


Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appx. No. 26 DB 1 Profile - Successful Defensive Backs



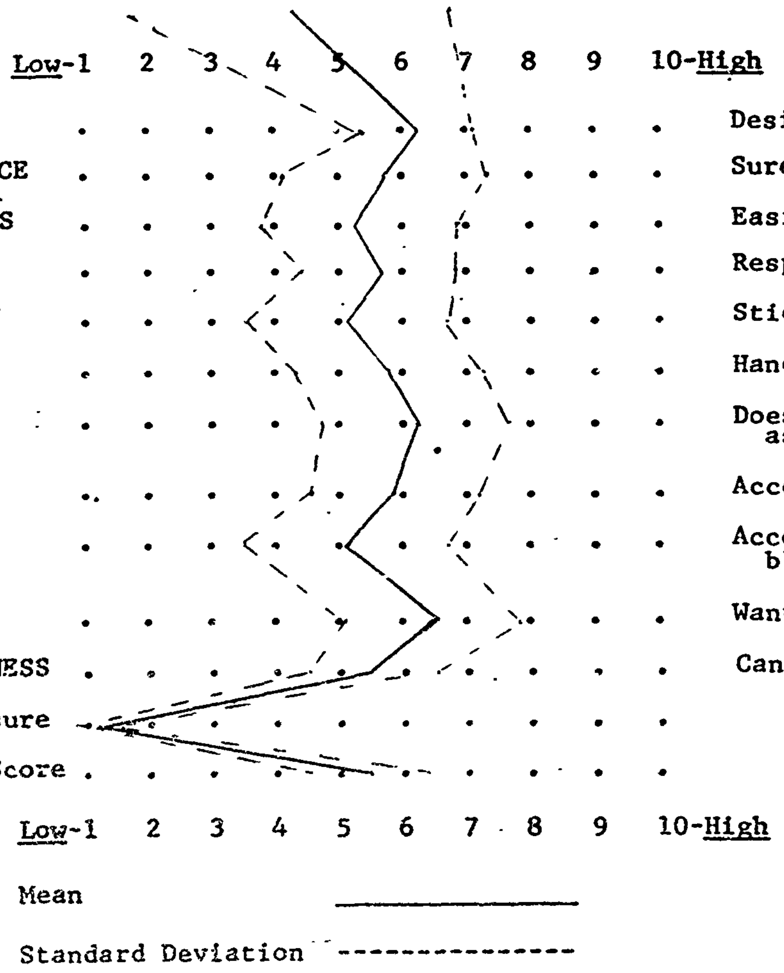

Test
Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED — OUTGOING
16 LESS INTELLIGENT — MORE INTELLIGENT
17 AFFECTED BY FEELINGS — EMOTIONALLY STABLE
18 HUMBLE — ASSERTIVE
19 SOBER — HAPPY GO LUCKY
20 EXPEDIENT — CONSCIENTIOUS
21 SHY — VENTURESOME
22 TOUGH MINDED — TENDER MINDED
23 TRUSTING — SUSPICIOUS
24 PRACTICAL — IMAGINATIVE
25 FORTHRIGHT — SHREWD
26 PLACID — APPREHENSIVE
27 CONSERVATIVE — EXPERIMENTING
28 GROUP DEPENDENT — SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT — CONTROLLED
30 RELAXED — TENSE
31 LOW ANXIETY — HIGH ANXIETY
32 INTROVERSION — EXTROVERSION
33 TENDERMINDED EMOTIONALITY — ALERT POISE
34 SUBDUEDNESS — INDEPENDENCE
1 2 3 4 5 6 7 8 9 10

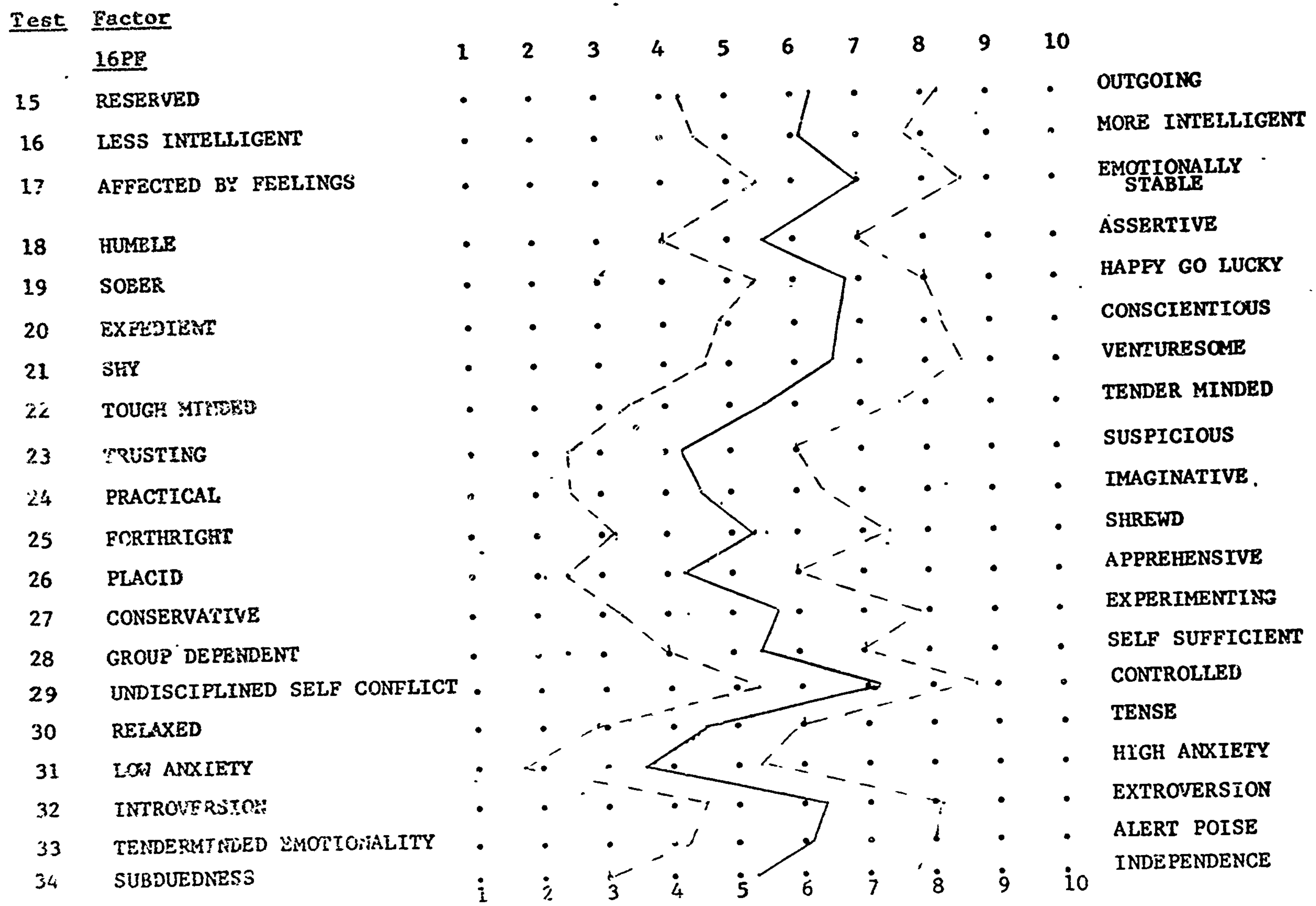


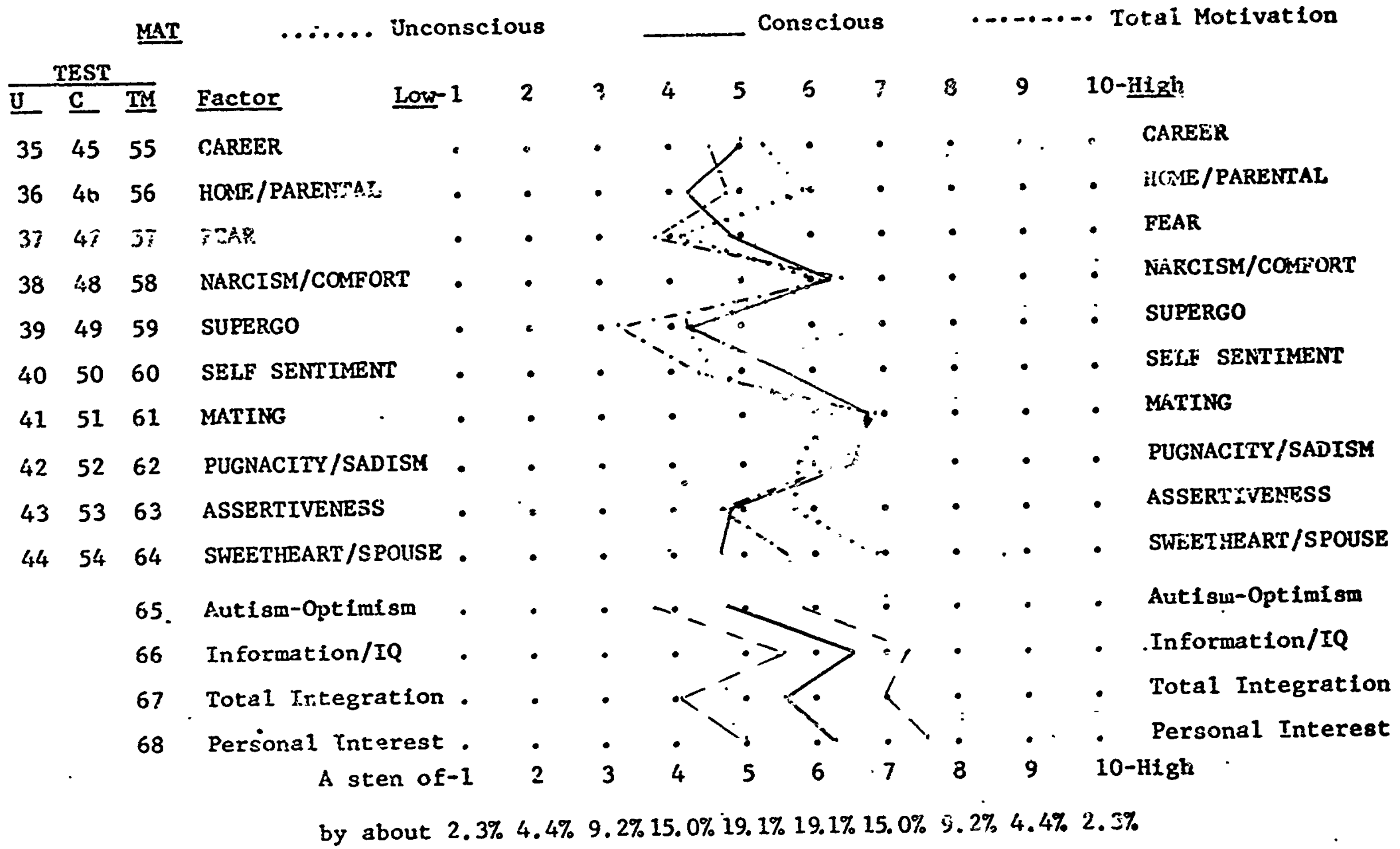
Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

Appx. No. 27 DB 9 Profile - Unsuccessful Defensive Backs

Test	Factor	
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13	Accuracy Measure	
14	Strength of Score	

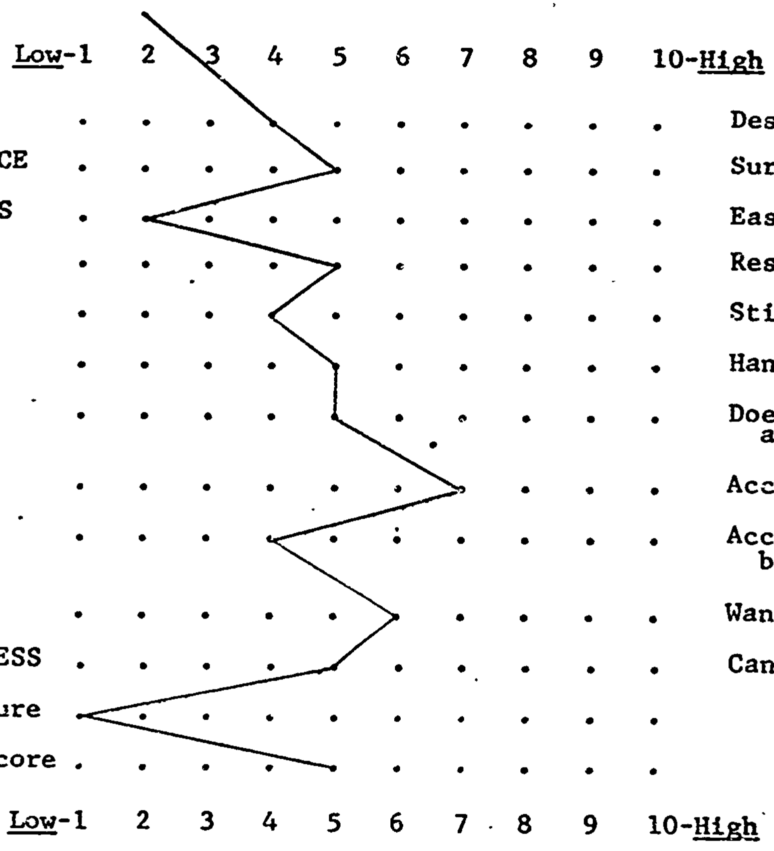



Test
Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED
16 LESS INTELLIGENT
17 AFFECTED BY FEELINGS
18 HUMBLE
19 SOBER
20 EXPEDIENT
21 SHY
22 TOUGH MINDED
23 TRUSTING
24 PRACTICAL
25 FORTHRIGHT
26 PLACID
27 CONSERVATIVE
28 GROUP DEPENDENT
29 UNDISCIPLINED SELF CONFLICT
30 RELAXED
31 LOW ANXIETY
32 INTROVERSION
33 TENDERMINDED EMOTIONALITY
34 SUBDUEDNESS
OUTGOING
MORE INTELLIGENT
EMOTIONALLY STABLE
ASSERTIVE
HAPPY GO LUCKY
CONSCIENTIOUS
VENTURESOME
TENDER MINDED
SUSPICIOUS
IMAGINATIVE
SHREWD
APPREHENSIVE
EXPERIMENTING
SELF SUFFICIENT
CONTROLLED
TENSE
HIGH ANXIETY
EXTROVERSION
ALERT POISE
INDEPENDENCE



Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

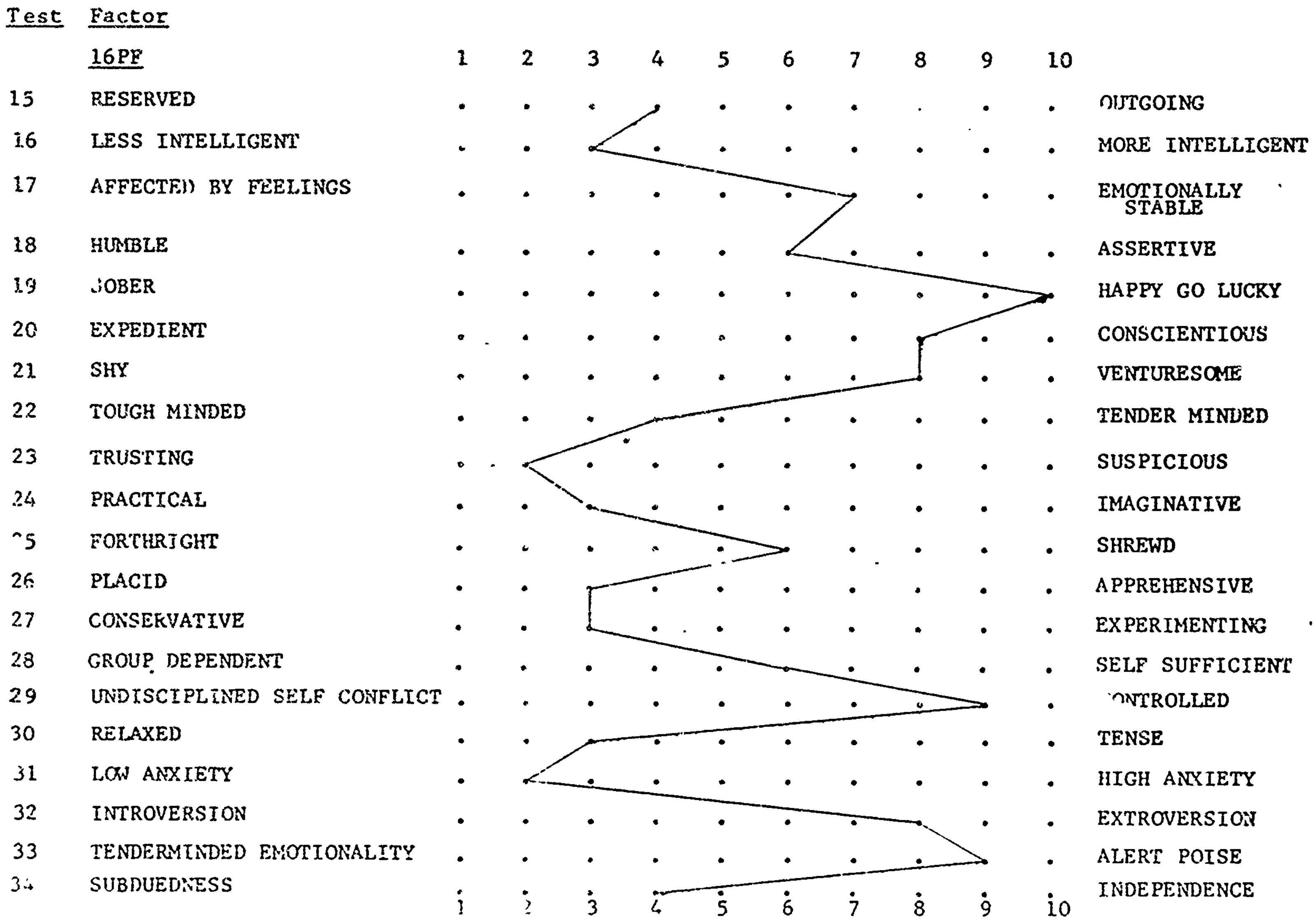
Appx. No. 28 SP 1 Profile - Successful Specialists



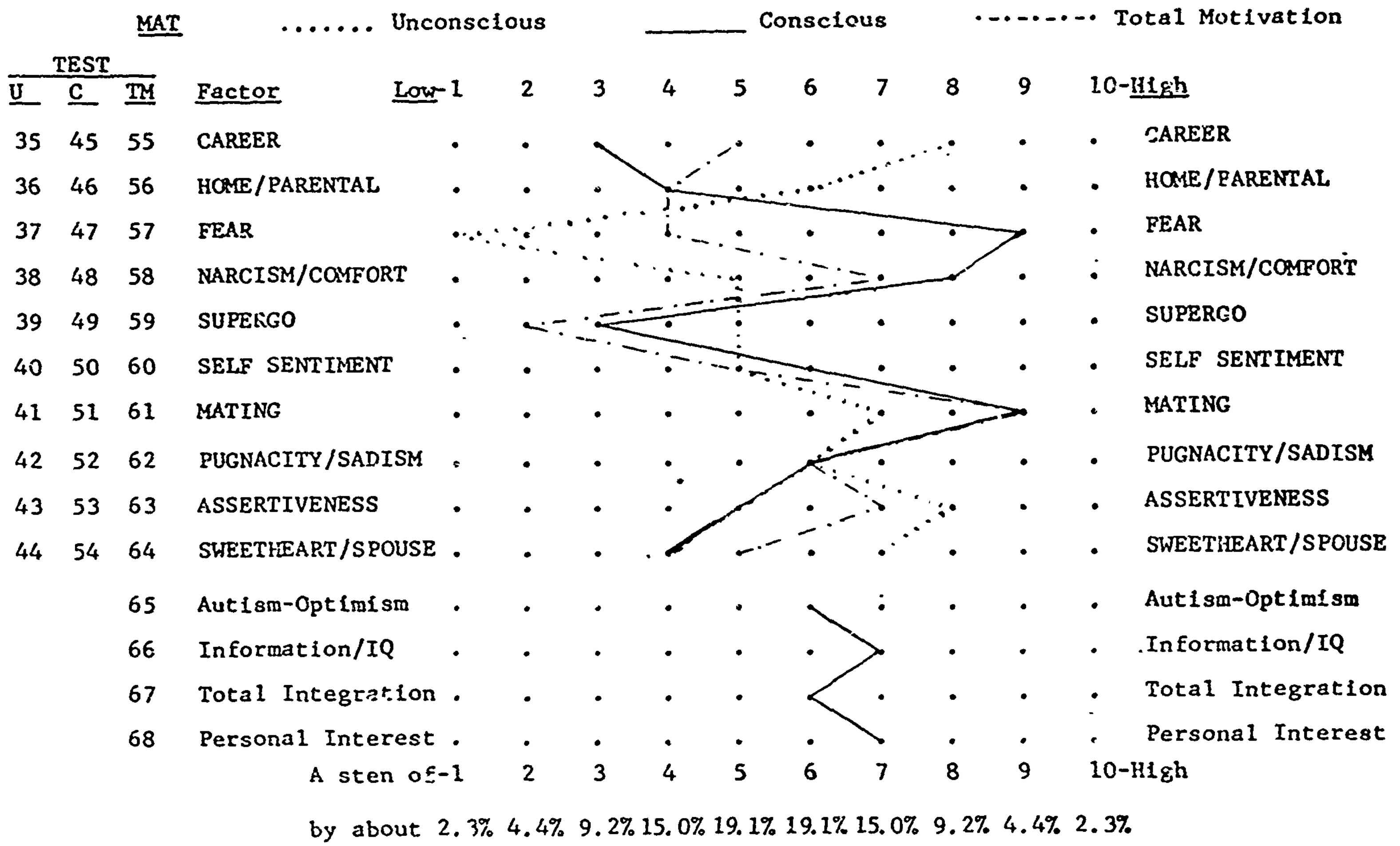
Test	Factor	
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13	Accuracy Measure	
14	Strength of Score	

Mean ————————

Standard Deviation ---------------



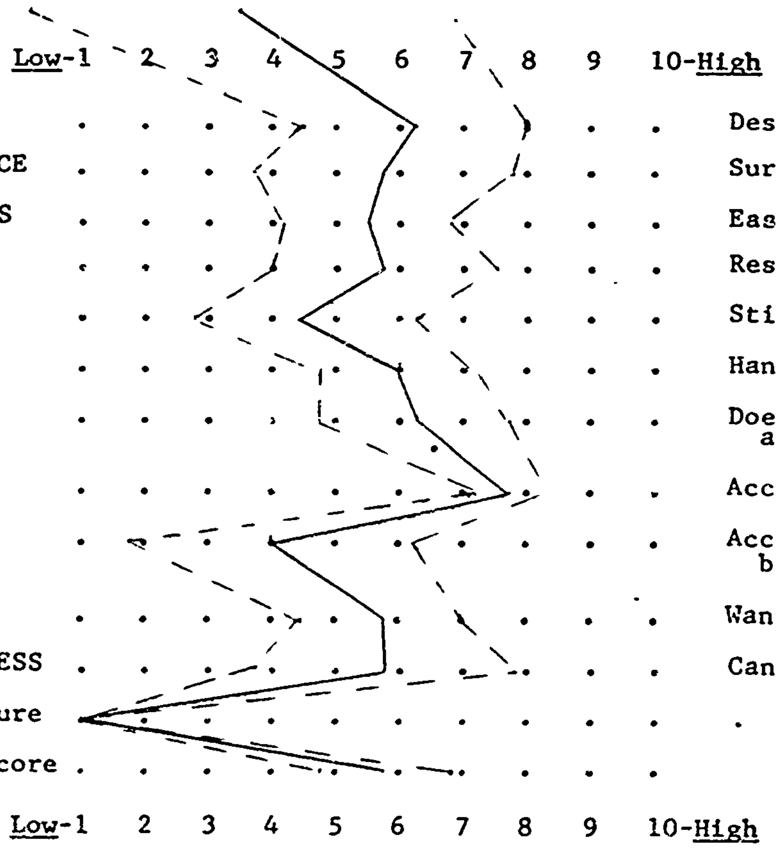
Test
Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED
OUTGOING
16 LESS INTELLIGENT
MORE INTELLIGENT
17 AFFECTED BY FEELINGS
EMOTIONALLY STABLE
18 HUMBLE
ASSERTIVE
19 SOBER
HAPPY GO LUCKY
20 EXPEDIENT
CONSCIENTIOUS
21 SHY
VENTURESOME
22 TOUGH MINDED
TENDER MINDED
23 TRUSTING
SUSPICIOUS
24 PRACTICAL
IMAGINATIVE
25 FORTHRIGHT
SHREWD
26 PLACID
APPREHENSIVE
27 CONSERVATIVE
EXPERIMENTING
28 GROUP DEPENDENT
SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT
CONTROLLED
30 RELAXED
TENSE
31 LOW ANXIETY
HIGH ANXIETY
32 INTROVERSION
EXTROVERSION
33 TENDERMINDED EMOTIONALITY
ALERT POISE
34 SUBDUEDNESS
INDEPENDENCE
1 2 3 4 5 6 7 8 9 10



Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table for the "unconscious" scores; in table for the "conscious" scores; and in table for the "total motivation scores."

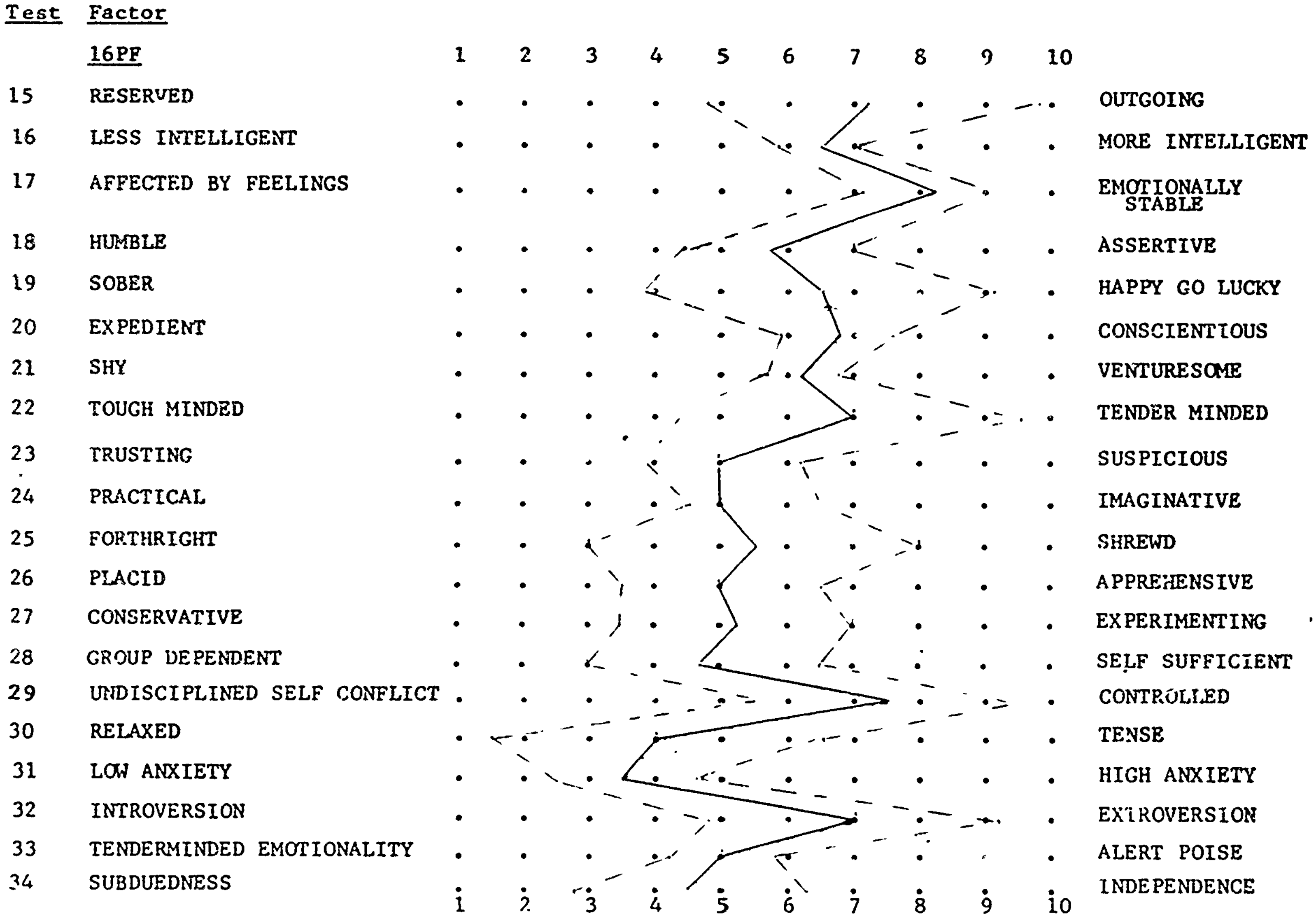
Appx. No. 29 SP 9 Profile - Unsuccessful Specialists

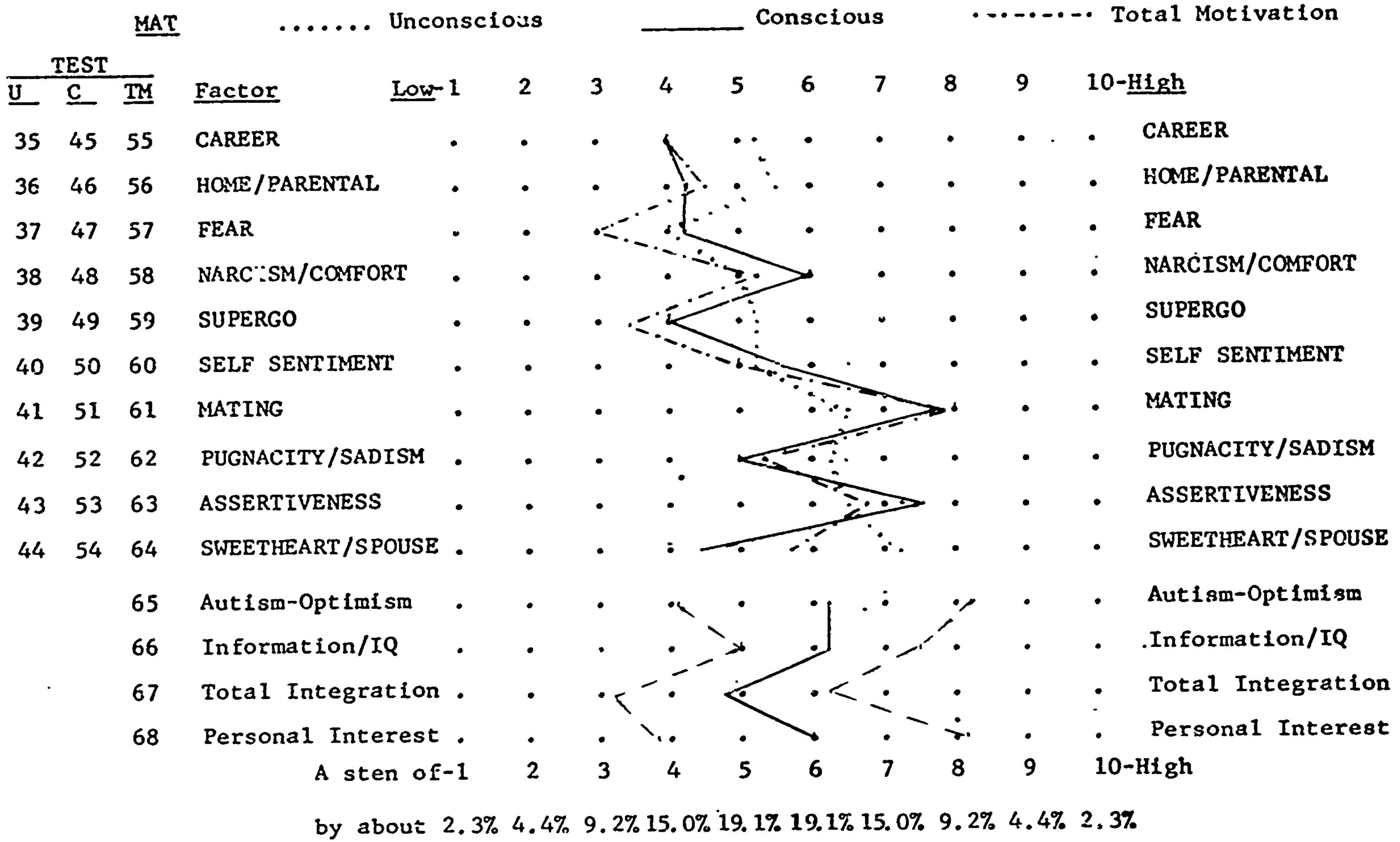
Test	Factor	Description
1	CWF-2	
	AMI	
2	DRIVE	Desire to be a winner
3	SELF CONFIDENCE	Sure of himself and of his ability
4	AGGRESSIVENESS	Easily asserts himself
5	COACHABILITY	Respects coaching
6	DETERMINATION	Sticks with things
7	EMOTIONALITY	Handles his feelings well
8	CONSCIENCE DEVELOPMENT	Does things as correctly as as possible
9	TRUST	Accepts people at face value
10	GUILT PRONESS	Accepts responsibility; accepts blame
11	LEADERSHIP	Wants to take charge of others
12	MENTAL TOUGHNESS	Can take a rough chewing out
13	Accuracy Measure	
14	Strength of Score	



Mean ________________

Standard Deviation ---------------


Test
Factor
16PF
1 2 3 4 5 6 7 8 9 10
15 RESERVED — OUTGOING
16 LESS INTELLIGENT — MORE INTELLIGENT
17 AFFECTED BY FEELINGS — EMOTIONALLY STABLE
18 HUMBLE — ASSERTIVE
19 SOBER — HAPPY GO LUCKY
20 EXPEDIENT — CONSCIENTIOUS
21 SHY — VENTURESOME
22 TOUGH MINDED — TENDER MINDED
23 TRUSTING — SUSPICIOUS
24 PRACTICAL — IMAGINATIVE
25 FORTHRIGHT — SHREWD
26 PLACID — APPREHENSIVE
27 CONSERVATIVE — EXPERIMENTING
28 GROUP DEPENDENT — SELF SUFFICIENT
29 UNDISCIPLINED SELF CONFLICT — CONTROLLED
30 RELAXED — TENSE
31 LOW ANXIETY — HIGH ANXIETY
32 INTROVERSION — EXTROVERSION
33 TENDERMINDED EMOTIONALITY — ALERT POISE
34 SUBDUEDNESS — INDEPENDENCE
1 2 3 4 5 6 7 8 9 10



Note: The above profile represents mean scores with standard deviation scores for the MAT to be found in table   for the "unconscious" scores; in table   for the "conscious" scores; and in table   for the "total motivation scores."

Appx. No.30 - MAT "Unconscious" Standard Deviation Scores for "1/9" Files

	Files											
TEST	C1	C9	G1	G9	T1	T9	TE1	TE9	RB1	RB9	WR1	WR9
35	.58	1.35	2.28	1.73	1.69	1.81	.58	1.5	1.90	1.86	1.51	1.73
36	2.45	1.90	.55	1.98	1.80	1.78	2	.5	1.95	2.10	1.05	1.69
37	1.83	1.25	1.48	2.53	1.95	1.90	3.46	1	1.51	2.41	1.60	1.63
38	1.41	.90	2.30	2.22	2.24	1.31	1.15	1.29	1.53	2.43	1.72	2.02
39	1.73	1.86	1.64	2.20	1.86	1.44	1.15	1.89	2.36	1.45	2.80	2.13
40	1.91	.98	1.30	1.32	1.90	2.01	1.15	1.71	2.56	1.80	1.41	1.79
41	1.71	1.53	2.92	1.22	2.52	1.44	1	1	1.50	1.86	1.94	1.65
42	.5	3.51	1.92	2.08	1.72	1.72	2.31	3.11	2.15	2.27	1.41	1.90
43	1.73	1.21	1.95	1.71	1.91	1.53	2.65	.58	1.72	1.50	1.10	1.87
44	2.63	2.23	1	2.40	1.68	1.86	.58	1.26	2.37	1.74	2.32	2.26

Files

TEST	QB1	QB9	DE1	DE9	LB1	LB9	DB1	DB9	SP1	SP9
35	2.65	1.52	1.29	1.75	2.17	1.41	1.20	1.47	0	1.26
36	2.08	2.40	.58	1.74	2.95	2.19	1.90	2.03	0	3.42
37	1	1.96	2.08	1.97	2.35	2.08	2.28	2.25	0	2.45
38	.58	2.11	1.41	1.63	1.87	2.06	1.27	1.57	0	2
39	2.52	1.83	2.65	1.96	1.87	1.90	1.67	1.46	0	2.22
40	.58	1.67	1.15	1.62	1.33	1.82	1.5	1.21	0	.96
41	1.15	1.54	1.15	1.59	2.01	1.94	1.41	1.86	0	1.29
42	1	1.80	2.08	1.61	2.19	2.61	2	2.26	0	1.71
43	.58	2.01	2.16	1.39	2.28	1.63	2.30	1.92	0	2.08
44	2.52	1.88	.58	2.02	1.45	1.95	2.11	2.09	0	1.5

Appx. No.31 - MAT "Conscious" Standard Deviation Scores for "1/9" Files

						Files						
TEST	C1	C9	G1	G9	T1	T9	TE1	TE9	RB1	RB9	WR1	WR9
45	1.41	1.41	2.12	2.22	1.85	1.08	2.08	2.71	.90	1.91	1.90	1.60
46	2.94	1.21	.84	1.02	1.46	1.88	.58	.82	1.29	1.99	1.72	1.93
47	.96	1.73	2.49	1.79	2.29	1.13	1.53	1.29	2.07	2.58	2.34	1.80
48	.96	1.81	1.52	2.14	1.81	1.44	1.53	2	2.07	1.63	1.47	1.55
49	1.15	1.77	2.28	2/10	1.36	1.14	1.53	1.83	2.27	1.36	1.60	1.89
50	1.26	1.27	.45	2.02	1.29	1.53	.58	2.22	1.60	.94	.75	1.35
51	1.63	1.62	2.28	2.18	1.79	2.17	3.21	.96	1.83	1.64	2.51	1.73
52	.58	.95	2.28	2.10	1.33	1.59	.58	1.71	1.80	1.77	1.47	1.60
53	2.87	1.35	1.64	1.76	1.01	2.62	2	1.29	2.65	1.65	2.37	1.76
54	.82	1.29	2.77	1.96	1.97	2.11	1	2.16	2.13	1.54	1.83	1.72

Files

TEST	QB1	QB9	DE1	DE9	LB1	LB9	DB1	DB9	SP1	SP9
45	1.15	1.73	.82	1.92	1.72	2.01	1.72	1.69	0	1.83
46	1.53	1.74	1.15	1.55	1.12	1.91	1.81	1.88	0	1.26
47	2	1.96	1.29	2.02	1.56	1.44	1.22	1.95	0	2.40
48	2.08	1.25	.82	1.81	2.22	1.59	1.86	1.65	0	1.63
49	1.15	1.95	1.29	1.92	1.58	1.75	1.94	1.49	0	.82
50	1	1.53	1.29	1.70	.78	1.35	1.05	1.36	0	1.73
51	1.15	1.58	.58	1.39	1.58	2.07	1.5	1.66	0	.5
52	3	1.39	1.26	2.31	1.5	1.61	1.24	1.94	0	3.37
53	1.73	1.80	.96	2.02	1.72	2.02	2.06	1.69	0	1.91
54	2	2.10	1.15	1.44	2.50	1.08	2.19	1.63	0	2.52

Appx. No.32 - MAT "Total Motivation" Standard Deviation Scores for "1/9" Files

Files

TEST	C1	C9	G1	G9	T1	T9	TE1	TE9	RB1	RB9	WR1	WR9
55	1.91	2.21	2.79	3.12	2.34	1.62	1.53	3.10	1.70	2.71	2.40	2.43
56	3.5	2.77	1.14	2.46	2.69	2.48	2.08	.96	1.27	2.27	1.33	2.18
57	3.34	1.86	3.78	3.12	2.88	2.35	3.46	1.89	2.61	3.29	2.40	2.44
58	2.22	2.81	2.51	2.89	3.04	2.35	1.73	3.11	2.45	2.97	2.10	2.87
59	0	2.34	1.82	3.10	2.25	2.19	1.73	1.26	2.34	2.03	3.06	2.74
60	2.16	2.04	1.22	2.02	1.99	2.28	1	2.38	2.44	2.35	1.94	2.18
61	.5	2.44	3.11	2.78	3.00	2.53	4.04	1.89	2.16	2.58	2.58	2.26
62	.5	3.41	2.79	2.76	2.32	2.35	2.89	2.89	1.73	2.84	1.03	2.22
63	3.30	1.15	.89	1.46	2.66	2.71	1	1.63	2.75	2.16	2.58	2.52
64	2.22	2.61	3.42	3.01	2.32	2.96	1.15	2.75	3.11	2.33	3.41	2.28

TEST	QB1	QB9	DE1	DE9	LB1	LB9	DB1	DB9	SP1	SP9
				Files						
55	2.31	2.17	1.89	2.00	2.67	2.10	2.03	2.47	0	.82
56	1	2.62	1.5	1.72	2.95	2.76	1.87	2.32	0	3.87
57	1.73	2.89	3.32	3	2.92	2.50	2.42	2.87	0	2.16
58	1	2.42	2	2.80	2.83	2.58	1.94	2.46	0	2.99
59	2.65	2.66	1.91	2.82	2.52	2.44	2.24	2.00	0	2.08
60	1.73	2.25	2.06	2.38	1.58	2.04	1.76	1.97	0	1.63
61	1.15	2.07	1.73	2.17	2.13	2.39	2	2.08	0	1.15
62	3.61	2.31	2.65	2.75	2.15	3.01	2.49	3.08	0	2.06
63	2.31	2.15	2.52	2.41	2.19	2.81	3.18	2.43	0	3.20
64	3.79	2.63	1.29	2.13	3.23	2.25	3	2.24	0	3.10

Appx. No.33 - "1/9" LINE SUMMARIES FROM ANALYSIS OF VARIANCE

Run #	Group 1	Group 2	# in Group 1	# in Group 2	DEGREES OF FREEDOM Among Columns (V1)	 Error Within (V2)
1	C1	C9	4	7	1	9
2	G1	G9	5	13	1	16
3	T1	T9	11	12	1	21
4	TE1	TE9	3	4	1	5
5	RB1	RB9	7	14	1	19
6	WR1	WR9	6	20	1	24
7	QB1	QB9	3	23	1	24
8	DE1	DE9	4	15	1	17
9	LB1	LB9	9	27	1	34
10	DB1	DB9	9	27	1	34
11	SP1	SP9	1	4	1	3

SELECTED BIBLIOGRAPHY

Books

Anastasi, Anne. Psychological Testing. New York: The Macmillan Company, 1965.

Axline, Virginia Mae. Play Therapy. Boston: Houghton Mifflin Company, 1947.

Cattell, Raymond B., Eber, Herbert W. and Tatsuoka, Maurice M. Handbook for the Sixteen Personality Factor Questionnaire (16PF). Champaign: Institute for Personality and Ability Testing, 1970.

Coville, Walter J., Costello, Timothy W. and Rouke, Fabian L. Abnormal Psychology. New York: Barnes and Noble, Inc., 1960.

Freud, Sigmund. A General Introduction to Psychoanalysis. New York: Garden City Publishing Company, Inc., 1943.

Harrower, Molly. Appraising Personality. New York: Franklin Watts, Inc., 1964.

Jourard, Sidney M. Personal Adjustment. New York: The Macmillan Company, 1967.

Lazarus, Richard S. Personality and Adjustment. Englewood Cliffs: Prentice-Hall Inc., 1963.

Maslow, A. H. Motivation and Personality. New York: Harper and Brothers, 1954.

Murray, Edward J. Motivation and Emotion. Englewood Cliffs: Prentice-Hall Inc., 1964.

Ogilvie, Bruce C. and Tutko, Thomas A. Problem Athletes and How To Handle Them. London: Pelham Books Ltd., 1968.

Pennington, L. A. and Berg, Irwin A. An Introduction to Clinical Psychology. New York: The Ronald Press Company, 1948.

Young, Paul Thomas. Motivation and Emotion. New York: John Wiley and Sons, Inc., 1961.

Articles

Barrett, Richard S. "Guide to Using Psychological Tests." Harvard Business Review. September-October 1963.

Cattell, Raymond B. "The Nature and Measurement of Anxiety." Scientific American. March 1963.

Cohen, Jozet. "Personality Dynamics." Eyewitness Series in Psychology. No. 17, 1969.

Eysenck, H. S. "The Measurement of Motivation." Scientific American. May 1963.

Holland, Howard K. "Decision Making and Personality." Personnel Administration. May-June 1968.

Jares, Joe. "We Have a Neurotic in the Backfield Doctor." Sports Illustrated. January 18, 1971.

Johnsgard, Keith W. and Ogilvie, Bruce C. "The Competitive Racing Driver." The Journal of Sports Medicine and Physical Fitness. Vol. 8, No. 2, June 1968.

Ogilvie, Bruce, and Tutko, Thomas. "A Psychologist Reviews the Future Contribution of Motivational Research in Track and Field." Track and Field News. September 1, 1963.

Ogilvie, Bruce C. "Psychological Consistencies Within the Personality of High Level Competitors." Journal American Medical Association. September-October, 1968.

Ogilvie, Bruce C. and Tutko, Thomas A. "If You Want to Build Character, Try Something Else." Psychology Today. October 1971.

Ogilvie, Bruce C. and Tutko, Thomas A. "Some Psychological Traits of the Successful Coach." Scholastic Coach. June 1970.

Ogilvie, Bruce C., Tutko, Thomas A. and Young, Irving. "The Psychological Profile of Olympic Champions. A Brief Look at Olympic Medalists." Swimming Techniques Quarterly. January-February 1965.

Theory into Practice. Volume IX, Number 1, February 1940.

Reports

Horst, Paul. Multiple Prediction Studies. A report for the Office of Naval Research. Project NR 151-143, June 1970.

Horst, Paul. Scale Free Reduced Rank Image Analysis. A report for the Office of Naval Research. Project NR 151-143, June 1970.

Ogilvie, Bruce C. Negative and Positive Factors Associated With Athletic Competition. A report presented to the American Academy of Orthopaedic Surgeons, July 1969.

Ogilvie, Bruce C. Psychosocial Variables that Influence Attitudes Towards Injury. A report presented to the American Academy of Orthopaedic Surgeons, San Francisco, August 3, 1970.

Ogilvie, Bruce C. The Unanswered Question: Competition, Its Effect Upon Femininity. A report presented to the Olympic Development Committee, Santa Barbara, California, June 30, 1967.

Olgivie, Bruce C. and Johnsgard, Keith W. The Personality of the Male Athlete. A report presented to the American Academy of Physical Education, Las Vegas, Nevada, April 1967.

Ogilvie, Bruce C. and Tutko, Thomas A. Self Perception as Compared With Measured Personality of Selected Male Physical Educators. A report presented to the 2nd International Conference of Sports Psychology, Washington, D. C., October 29, 1968.

Pickrel, Evan W. The Differential Effect of Manifest Anxiety on Test Performance. A report in the Air Force Personnel Center technical documentary report series, AFPTRC-TN-57-4.

Unpublished Reports

Analysis of Concept of Validity

Kane, J. R. Personality Traits of Young Footballers. Unpublished Master's Thesis, 1966.

Ogilvie, Bruce. Psychology in Track.

Ogilvie, Bruce. The Mental Ramblings of a Psychologist Researching in the Area of Sports Motivation.

Ogilvie, Bruce C. Factors That Contribute to the Unconscious Fear of Success.

Ogilvie, Bruce C. One of the Prices for Being on Top.

Ogilvie, Bruce C. Psychometric Approach in Coaching.

Ogilvie, Bruce C. Selected Case Histories of Problem Athletes.

Ogilvie, Bruce and Tutko, Tom. Tough-Minded, Immature. The case history of a problem athlete.

Ogilvie, Bruce and Tutko, Tom. When is Pain Real?

Ogilvie, Bruce C. and Tutko, Thomas. Comparison of a "Potential-Realizer" with a "Potential Non-Realizer."

Ogilvie, Bruce C. and Tutko, Thomas. Unable to be First.

Ogilvie, Bruce C. and Tutko, Thomas A. Case No. 1, Event: Field. A case study of a problem athlete.

Rushall, Brent S. The Analysis of the Personality of a Football Squad and Suggestions for Utilizing Findings (16PF Athletes). 1968

Test Validation and Construct Validity. Definitions.